Skopin, M. I. 3/3

plus élémentaires, d'ailleurs, que celles du travail considéré de Skopin) que G^* est isomorphe, en tant que groupe topologique, au quotient du complété F^*_{n+2}, par rapport à sa p-topologie, du groupe libre F_{n+2} de $n+2$ générateurs par l'adhérence de son sous-groupe invariant engendré, en tant que tel, par un unique élément ρ de ce groupe. Il n'arrive pas, toutefois, à déterminer complètement la forme de G^*. Ainsi, tandis que Kawada détermine, d'une manière incomplète seulement, la structure du groupe G^* tout entier, l'auteur détermine complètement la structure d'un facteur assez petit de ce groupe. *M. Krasner* (Paris).

CARD 1/4 PG - 536

SUBJECT USSR/MATHEMATICS/Algebra
AUTHOR SKOPIN A.I.
TITLE p-extensions of a local field which contains the p^M-th root of unity.
PERIODICAL Izvestija Akad.Nauk 19, 6, 445-470 (1955)
reviewed 1/1957

Let k_0 be a local field, i.e. finite algebraic extension of a p-adic field ($p \neq 2$), and let k_{i+1} arise from k_i by adjunction of all normal fields of p-th degree for $i \geqq 0$. The determination of the Galois group $\mathfrak{G}_m$ of k_m was made by Šafarevič for the case that k_0 does not contain the p-th roots of unity. In the present paper the author determines $\mathfrak{G}_m$ for the case that k_0 contains the p^M-th roots of unity with $M \geqq m$. Result: $\mathfrak{G}_m = \mathfrak{F}/\mathfrak{F}^{(m)}$. Here $\mathfrak{F}$ is the fundamental group with the generating elements $a_1,\ldots,a_\nu$, $b_1,\ldots,b_\nu$ and with the single relation

$$a_1 b_1 a_1^{-1} b_1^{-1} \cdots a_\nu b_\nu a_\nu^{-1} b_\nu^{-1} = 1,$$

known from the topology. Furthermore p^ν is the index of the group of all p-th

powers $\neq 0$ of k_o in the group of all numbers $\neq 0$ of k_o, finally $\mathfrak{G}^{(o)} = \mathfrak{G}$ for an arbitrary group $\mathfrak{G}$ and $\mathfrak{G}^{(i+1)}$ is the minimal normal subgroup of $\mathfrak{G}^{(i)}$ with elementary, i.e. abelian factor group of the type (p,p,...). The group-theoretical auxiliary means: 1) Let $\mathfrak{G}_1$ be a finite p-group with a minimal number of generating elements ν, S be the free group with generating elements, $\mathfrak{G}_1 = S/H_1$, $H_2 = H_1^p [H_1,S]$, where H_1^p are generated from the p-th powers of the $h_1 \in H_1$ and $[H_1,S]$ from the $h_1 s\ h_1^{-1} s^{-1}$ with $s \in S$. Then the group of the classes of associated factor systems which belong to the extension problem of H_1/H_2 by means of S/H_1, is isomorphic to H_1/H_2. 2) A canonical representation of the factor group S/S_i is given where $S_1 = S^p [S,S]$ and $S_{i+1} = S_i^p [S_i,S]$ and the representation of S is used in the ring of the formal power series ($a_s = 1+x_s$, $a_s^{-1} = 1-x_s+x_s^2 - \ldots$ for the generating elements a_s of S).

3) If H is a subgroup of the index i of the fundamental group $\mathfrak{F}$ with 2h generating elements, then H itself is a fundamental group with i(2h-2)+2 generating elements.
4) Let $\mathfrak{R}$ be a finite group with an even number of generating elements $a_1,\ldots,a_{2\nu}$, further $\phi = \mathfrak{R}^p [\mathfrak{R},\mathfrak{R}]$, $\phi_1 = [\phi,\mathfrak{R}]$. If then

$$a_1 a_2 a_1^{-1} a_2^{-1} \cdots a_{2\nu-1} a_{2\nu} a_{2\nu-1}^{-1} a_{2\nu}$$

lies in ϕ_1, then $\mathfrak{R}$ is a homomorphic image of the fundamental group with 2ν generating elements.
The field-theoretical considerations: 1) Let $\overline{k_2}$ be the compositum of all central cyclic extensions of p-th degree of k_1. The application of the imbedding theorem due to R.Brauer yields the structure of the Galois group of $\overline{k_2}$.

2) Between $\overline{k_2}$ and k_m still the field $\overline{k_m}$ is put which arises from $\overline{k_2}$ by adjunction of the p^m-th roots of the elements of k_o. The application

SKOPIN, A.I.; ROMANOV, P.A.

Hermetic sealing of corrugated cardboard boxes. Khleb. i kond. prom. 1 no.9:41-44 S '57. (MIRA 10:11)

1. Moskovskaya biskvitnaya fabrika "Bol'shevik."
(Paperboard) (Packaging machinery)

16(1)
AUTHORS: Faddeyev, D.K., Skopin, A.I. SOV/20-127-3-13/71

TITLE: On the Proof of a Theorem of Kawada

PERIODICAL: Doklady Akademii nauk SSSR,1959,Vol 127,Nr 3,pp 529-530 (USSR)

ABSTRACT: The group of a normal algebraic p-extension k of the local field k_o of degree n_o over R_p is representable as a factor group S/H, where S is a free group with $\nu = n_o + 2$ generators and H normal subgroup of S. If all fields k are contained in a fixed extension of K, then the k and the normal subgroups H stand in a one-to-one relation. It is proved that to the fields k there correspond exactly those H which contain a fixed word from S for a fixed K. This statement gives a simpler proof of the result of Kawada [Ref 1].
There are 4 references, 1 of which is Soviet, 1 Japanese, and 2 German.

PRESENTED: April 11, 1959, by I.M. Vinogradov, Academician
SUBMITTED: April 9, 1959

Card 1/1

FADDEYEV, Dmitriy Konstantinovich; PETROVSKIY, I.G., akademik, otv.red. Prinimali uchastiye: SHAPIRO, A.P., student; TUSHKINA, T.A., studentka; BOROVSKIY, Yu.Ye., student; SMIRNOV, G.P. [deceased], student; KUTIKOV, L.B., student; IVANOV, F.A.; NIKOL'SKIY, S.M., prof., zamestitel' otv.rd.; SKOPIN, A.I., kand.fiz.-mat.nauk, red.izdaniya; BARKOVSKIY, I.V., red.izd-va; BOCHEVER, V.T., tekhn.red.

[Tables of the fundamental unitary representations of Fedorov groups] Tablitsy osnovnykh unitarnykh predstavlenii fedorovskikh grupp. Moskva, Izv-vo Akad.nauk SSSR, 1961. 173 p. (Akademiia nauk SSSR. Matematicheskii institut. Trudy , vol.56) (MIRA 14:4)

1. Leningradskiy gosudarstvennyy universitet, matematiko-mekhanicheskiy fakul'tet (for Shapiro, Tushkina, Borovskiy, Smirnov, Kutikov).
2. Leningradskoye otdeleniye Matematicheskogo instituta im. V.A. Steklova (for Ivanov).
(Crystallography--Tables, etc.) (Groups, Theory of)

BOREVICH, Z.I.; SKOPIN, A.I.

Local field extensions with a normal basis for principal units.
Trudy Mat. inst. 80:45-50 '65. (MIRA 18:7)

SKOPIN, A.I.

Ideals of relations. Trudy Mat. inst. 80:117-128 '65. (MIRA 18:7)

SHIRIN, P.K., kandidat tekhnicheskikh nauk; SKOPIN, G.A., nauchnyy sotrudnik; BUDAKOV, S.V., nauchnyy sotrudnik; PEREL'YGIN, G.M., redaktor izdatel'stva; GUSEVA, S.S., tekhnicheskiy redaktor

[Standard flowsheets for finishing work] Tipovye tekhnologicheskie karty po otdelochnym rabotam. Moskva, Gos. izd-vo lit-ry po stroit. i arkhitekture, 1956. 135 p. (MLRA 10:2)

1. Moscow. Nauchno-issledovatel'skii institut organizatsii i mekhanizatsii stroitel'stva.
(Building)

SHIRIN, P.K., kand.tekhn.nauk; SKOPIN, G.A., nauchnyy sotrudnik; Prinimali uchastiye: ANTONOV, V.I., inzh.; ZELENIN, S.S., inzh.; BOGUSHEVICH, Ye.N., inzh.; KLIMOVA, G.D., red.izd-va; GOL'BERG, T.M., tekhn.red.

[Norms RN-1-60 for drawing-up plans for the organization of construction] Raschetnye normativy dlia sostavleniia proektov organizatsii stroitel'stva RN-1-60. Moskva, Gos.izd-vo lit-ry po stroit., arkhit. i stroit.materialam, 1960. 98 p. (MIRA 13:12)

1. Akademiya stroitel'stva i arkhitektury SSSR. Institut organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu. 2. Rukovoditel' Sektora organizatsii promyshlennogo stroitel'stva i tekhnologii proizvodstva rabot Nauchno-issledovatel'skogo instituta organizatsii, mekhanizatsii i tekhnicheskoy pomoshchi stroitel'stvu (for Shirin). 3. Otdel ekonomiki i organizatsii stroitel'stva Gosstroya SSSR (for Antonov, Zelenin, Bogushevich).
(Construction industry)

SKOPIN, Ivan Dmitriyevich; VOROTNIKOVA, R.V., red.

[Always searching] Vsegda v poiske. Voronezh, Voronezhskoe knizhnoe izd-vo, 1963. 43 p. (MIRA 18:1)

USSR/General and Specialized Zoology - Insects. P.

Abs Jour : Ref Zhur - Biol., No 8, 1958, 35294

Author : Skopin, N.G.
Inst :
Title : On the Biology of the Red-Winged Poplar Leaf Beetle and the Eastern Leaf Beetle in South Eastern Kazakhstan.

Orig Pub : Uch. zap. Kazakhsk. un-t, 1956, 21, 113-118.

Abstract : Melasoma populi is a dangerous pest; it lives on all kinds of cultivated and wildly growing poplar trees, on tugay poplar ("turanga"), on the aspen tree and all species of smooth-leaved willows. Angelastica alni orientalis feeds on the foliage mostly of the Lombardy poplar, willow and the apple, the elm, the "karagach"-elm, the hemp nettle, the weedy hamp, the camel thorn, the almond, lucerne and other trees. Data were given on the yearly cycle and the number of generations, phenology and ecology of the pests. Varieties in the activities of these pests

Card 1/2

SKOPIN, N.G.

Larvae of Hoplia averini Medv. (Coleopters, Scarabaeidae) [with summary in English]. Zool. zhur. 36 no.7:1093-1095 Jl '57.
(MLRA 10:9)

1. Kafedra zoologii bespozvonochnykh Kazakhskogo gosudarstvennogo universiteta.
(Ili Valley--Scarabaeidae) (Larvae--Insects)

USSR / General and Special Zoology. Insects. Harmful Insects and Mites. General Problems. P

Abs Jour: Ref Zhur-Biol., No 1, 1959, 2255.

Author : Skopin, N.
Inst : Zoological Institute, AS, Kazakh, SSR.
Title : May Beetles, Elaters and Pseudo-Wireworms of Virgin Lands in the North of Akmolinskaya Oblast'.

Orig Pub: Tr. In-ta zool. AN KAZSSR, 1958, 8, 138-145.

Abstract: Three and four harmful May beetle species, four and five elater species and five and seven harmful pseudo-wireworm /Alleculidae, Tenebrionidae, etc. resembling wireworms/ species were discovered in Atbasarskiy and Balkashinskiy Raydiscovered in Atbasarskiy and Balkashinskiy Rayons. Infestation by wireworms and to a lesser degree by pseudo-wireworms and May beetles was on

Card 1/2

SKOPIN, N.G.

Oodescelis iliensis Skopin sp. nova, a new species of darkling beetles of the tribe Platyscelini from southeastern Kazakhstan. Trudy Inst. zool. AN Kazakh. SSR 8:146-150 '58. (MIRA 11:6)
(Kazakhstan--Darkling beetles)

SKOPIN, N.G.

Larvae of root feeders of the group Brahmina (Coleoptera, Scarabaeidae) [with summary in English]. Zool. zhur. 37 no.2:301-305 F '58. (MIRA 11:3)

1. Kafedra zoologii Kazakhskogo gosudarstvennogo universiteta, Alma-Ata.
(Kazakhstan--Scarabaeidae) (Larvae--Insects)

SKOPIN, N.G.

Larvae of two species of the genus Cyphogenia Sol. (Coleoptera, Tenebrionidae) [with summary in English]. Zool.zhur. 37 no.10:1558-1561 O '58. (MIRA 11:11)

1. Kafedra zoologii Kazakhskogo gosudarstvennogo universiteta (Alma-Ata).
(Ili Valley--Darkling beetles) (Larvae--Insects)

SKOPIN, N.G.

Larvae of beetles of the tribe Platyopini (Coleoptera, Tenebrionidae). Zool.zhur. 38 no.1:69-75 Ja '59. (MIRA 13:4)

1. Chair of Zoology, Kazakh State University, Alma-Ata.
(Darkling beetles) (Larvae--Insects)

SKOPIN, N.G.

Larvae of the genus Adesmia Fisch. (Coleoptera, Tenebrionidae). Zool.zhur. 39 no.7:1039-1043 Jl '60. (MIRA 13:7)

1. Department of Zoology, Kazakh State University, Alma-Ata.
(Syr Darya Valley--Darkling beetles)
(Larvae--Insects)

SKOPIN, N.G.

Larvae of Dasytrogus transcaucasicus Brske. (Coleoptera, Scarabaeidae). Trudy Inst.zool. AN Kazakh. SSR 11:137-139 '60. (MIRA 13:11)
(Scarabaeidae)

SKOPIN, S.G.

Selecting a practical system for working the thick layers of coal in the Tom'-Usa deposit. Trudy Inst. gor. dela Sib. otd. AN SSSR no.3:81-99 '60. (MIRA 14:4)
(Kuznets Basin--Coal mines and mining)

SKOPIN, S.G.

Nature of the relationship between practical dimensions of entry chain pillars and the deciding factors. Trudy Inst. gor. dela Sib. otd. AN SSSR no.3:100-114 '60. (MIRA 14:4)
(Mining engineering)

SKOPIN, S. G.

Cand Tech Sci - (diss) "Several problems of the development of rich coal strata under conditions of the Tom'Usinskiy Deposits of the Kuzbass." Novosibirsk, 1961. 19 pp with nomographs; (Academy of Sciences USSR, Siberian Division of the Academy, Joint Academic Council for Physics-Mathematics and Tech Sci); 220 copies; price not given; (KL, 7-61 sup, 246)

[illegible], S.G., [illegible] CHEKALIN, G.N.

Investigating the problem concerning the balance of mine filling materials at the Prokop'evskugol' Trust. Vop. gor. davl. no.17: 39-42 '63. (MIRA 18:9)

1. Institut gornogo dela Sibirskogo otdeleniya AN SSSR.

L 10341-67 EWP(c)/EWP(k)/EWT(d)/EWP(h)/EWP(l)/EWP(v) IJP(c)
ACC NR: AP6029878 SOURCE CODE: UR/0413/66/000/015/0041/0042

40

AUTHORS: Ruzanov, Yu. N.; Kokhanov, B. T.; Skopin, V. K.

ORG: none

TITLE: Method for tolerance self-control of time-pulse measuring devices with indication of the sign of the deviation. Class 21, No. 184295

SOURCE: Izobret prom obraz tov zn, no. 15, 1966, 41-42

TOPIC TAGS: quality control, self adaptive control, control circuit, measuring apparatus

ABSTRACT: This Author Certificate presents a method for tolerance self-control of time-pulse measuring devices with indication of the sign of the deviation. To produce a signal for the suitability or unsuitability of the device with negative or positive measurement error, the output signals of n-a most significant digits of the counter and the output signals of n-b most significant digits of the counter (where n is the number of digits in the output code of the device, a is the number of least significant digits of the device counter comprising the negative tolerance field of self-control, and b is the number of least significant digits of the device counter comprising the positive tolerance field of self-control) are added in preliminary (channel) summators. The signals for the sign of the tolerance field in which the device operates are taken from these summators (see Fig. 1). "Ones" should be recorded in

UDC: 681.142-523.8

Card 1/2

L 10341-67
ACC NR: AP6029878

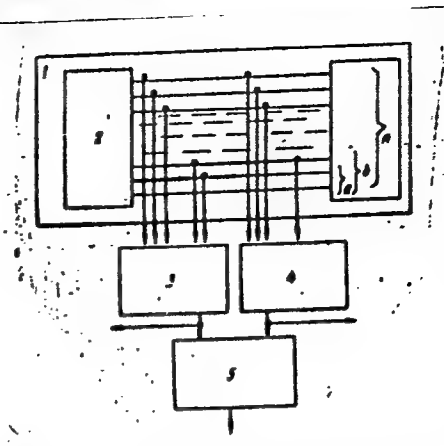
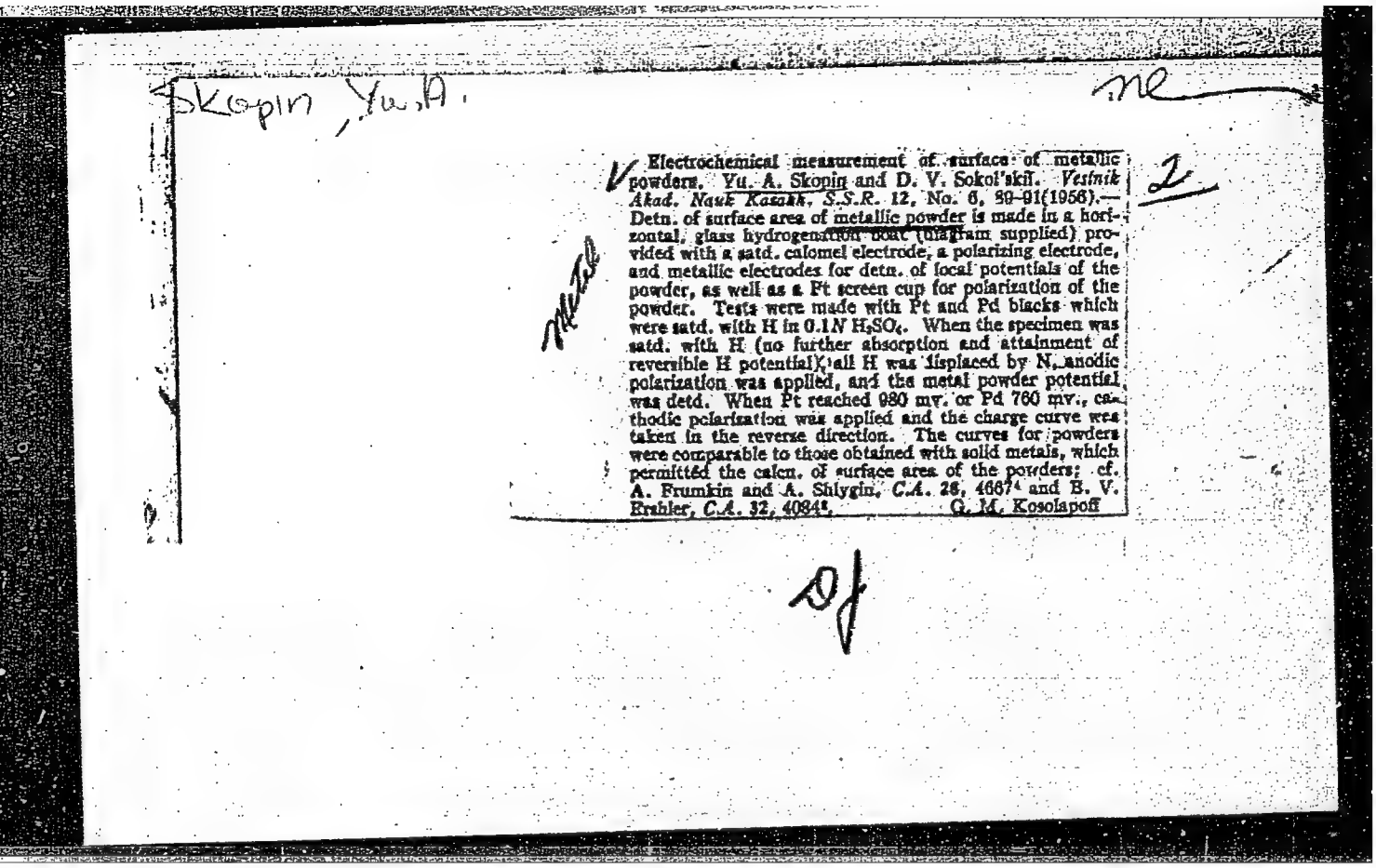


Fig. 1. 1 - measuring device; 2 - counter; 3 and 4 - summators of first and second channels; 5 - summator-analyzer

the n-a most significant digits as a result of self-control if the device is in the negative tolerance field of self-control. "Zeros" should be recorded in the n-b most significant digits if the device is in the positive tolerance field of self-control. The output signals of the channel summators are added in a summator-analyzer, and the suitability of the device is judged by the result. Orig. art. has: 1 diagram.

SUB CODE: 13,09/ SUBM DATE: 28Nov64

Card 2/2 mlo



Skopin, Yu. A.

Electrochemical measurement of surface of metallic powders. Yu. A. Skopin and D. V. Sokol'skii. *Vestnik Akad. Nauk Kazakh. S.S.R.* 12, No. 6, 89–91(1956).—Detn. of surface area of metallic powder is made in a horizontal, glass hydrogenation boat (diagram supplied) provided with a satd. calomel electrode, a polarizing electrode, and metallic electrodes for detn. of local potentials of the powder, as well as a Pt screen cup for polarization of the powder. Tests were made with Pt and Pd blacks which were satd. with H in 0.1*N* H_2SO_4. When the specimen was satd. with H (no further absorption and attainment of reversible H potential), all H was displaced by N, anodic polarization was applied, and the metal powder potential was detd. When Pt reached 980 mv. or Pd 760 mv., cathodic polarization was applied and the charge curve was taken in the reverse direction. The curves for powders were comparable to those obtained with solid metals, which permitted the calcn. of surface area of the powders; cf. A. Frumkin and A. Shlygin, *C.A.* 28, 4667[4] and B. V. Ershler, *C.A.* 32, 4084[8]. G. M. Kosolapoff

SKOPIN, Yu. A.

32-8-53/61

AUTHOR: None Given

TITLE: Short Reports (Korotkiye soobshcheniya).

PERIODICAL: Zavodskaya Laboratoriya, 1957, Vol. 23, Nr 8, pp. 1002-1004 (USSR)

ABSTRACT: Dmitriyev, P.P. (Tashkentskiy khimicheskiy institut Akademii nauk UzSSR) suggested an alteration in the already known apparatus for oil-refining and determining the effective boiling points of mineral oil products according to Badgadzher in that the separation of the fractions does not take place in the Kleisen-pistons but in the apparatus itself, which permits a reduction of the time needed for the experiment, the elimination of losses and greater accuracy. There are 2 figures.

Krishtul, V.P. and Paskutskaya, L.N. (Akademiya kommunal'nogo khozyastva) suggested a kind of water jet-sucking pump to be used for emptying the vessels after the experiments are finished, which is assumed to offer technical-practical advantages. There is 1 figure.

Skopin, Yu.A. (Kazakhskiy sel'skakhozyaystvennyy institut) suggested a device for gas washing which offers the advantage that the washing liquid can be used without shutting off the gas and in which the gas washing process takes place between the bottoms of two telescoped vessels. There is 1 figure.

Card 1/3

Short Reports

Korshunov, V.I. (Institut goryuchikh iskopayemykh Akademii nauk SSSR) suggested an apparatus for the fraction analysis of dispersive minerals. The apparatus consists of a cylindric vessel the lower end of which forms a cone and is connected to a tube where a straight-way cock is provided. At the side, in the middle of the cylinder, there is a feeder through which the fine-grained mineral is fed, mixed with a liquid which has approximately the same specific weight. The lighter fractions, which rise up are caught by the channel provided above; the heavier ones, which are deposited below, are eliminated by the straight-way cock.

Simonyan, A.A. (Moskovskiy torfyanoy institut) suggested an apparatus for the determination of the maximum of the shearing stress and the coefficients of the lateral pressure of the plastic materials (chalk, peat, etc.). The apparatus consists of a horizontally fixed tube of several parts which can easily be dissembled into its individual parts and has inside a thread-like cut which prevents the displacement of the material it contains. One of the branches of the tube has an inductor for measuring the lateral pressure. The pressure is caused by a piston, which is introduced into the tube. The other end of the tube is fitted with a closing device. The number of the parts of the tube is reduced by dismantling them as required. Examples of application, 1 figure.

80308
SOV/81-59-7-22596

5.3200
Translation from: Referativnyy zhurnal. Khimiya, 1959, Nr 7, p 73 (USSR)

AUTHORS: Sokol'skiy, D.V., Shmonina, V.P., Skopin, Yu.A., Tverdokhlebova, N.S., Dunina, L.P.

TITLE: The Investigation of the Liquid-Phase Hydration of Acetylene According to Kucherov. I. The Effect of the Composition of the Catalytic Solution on the Course of the Reaction

PERIODICAL: Tr. In-ta khim. nauk. AS KazSSR, 1958, Nr 2, pp 158 - 172

ABSTRACT: The hydration of C_2H_2 was studied by passing it through a sulfuric acid solution of HgO and $Fe_2(SO_4)_3$, depending on the composition and the temperature of the solution, the rate and the duration of passing C_2H_2 through the solution. The loss of catalytic activity of mercury compounds in the course of the process is caused by reducing them to mercury metal with its removal from the solution. In the absence of oxide iron the deactivation of the catalyst takes place more quickly, the introduction of $Fe_2(SO_4)_3$, though promoting the removal of mercury from a solution in a more dispersed state, inhibits its reduction, increasing the reaction rate. The

Card 1/2

5(4)

AUTHORS: Sokol'skiy, D. V., Academician of the AS Kazakh SSR, Skopin, Yu. A. SOV/20-126-2-30/64

TITLE: Investigation of an Oxide-Platinum Catalyst by the Electrochemical Method (Izucheniye okisno-platinovogo katalizatora elektrokhimicheskim metodom)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 126, Nr 2, pp 334-336 (USSR)

ABSTRACT: The present paper supplies data concerning the reduction of platinum oxide in acid and basic solutions accompanied by the simultaneous variation of the potential of the powder. Also the charge curves of platinum-niello were plotted. The production of the platinum oxide and the apparatus used for its reduction have already been described (Refs 2, 3). First, the reduction of platinum oxide into 0.1 n, 1 n, and 5 n sulphuric acid is discussed. A diagram shows the dependence of the quantity of oxygen absorbed on time, and the variation of the potential of the platinum wire during the reduction of the platinum oxide. During the first minutes of stirring, the potential shifts by 100 - 120 mv into the oxygen range,

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extent at the highest reduction velocity into the oxygen domain. The anodic charge curves of platinum-niello plotted in anodic solutions have no distinctly marked transition within the range of the double layer. The quantity of adsorbed hydrogen increases with increasing concentration of the base. The last part of the present paper deals with the reduction of platinum oxide in water, ethyl alcohol, n-hexane, and benzene. The curve of platinum-oxide reduction in n-hexane is similar to the analogous curve for 0.1n sulphuric acid. There are 4 figures and 4 references, 3 of which are Soviet.

ASSOCIATION: Kazakhskiy gosudarstvennyy universitet im. S. M. Kirova (Kazakh State University imeni S. M. Kirov)
Kazakhskiy sel'skokhozyaystvennyy institut (Kazakh Agricultural Institute)

SUBMITTED: February 10, 1959

SKOPINA, E.L.; LOPOTKO, I.A., professor, direktor; VOYACHEK, V.I., professor, deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR, nauchnyy rukovoditel'.

Allergic edema of the larynx. Vest. oto-rin. 15 no.4:84-85 Jl-Ag '53. (MLRA 6:9)

1. Leningradskiy nauchno-issledovatel'skiy institut bolezney ukha, gorla, nosa i rechi. (Larynx--Diseases) (Edema)

SKOPINA, E. L., Cand Med Sci -- (diss) "Intratruncal architectonics of the 8th pair of craniocerebral nerves." Saratov, 1957. 19 pp (Min of Health RSFSR, Saratov Med Inst) (KL, 52-57, 112)

SKOPINA, Eleonora Lyudvigovna

(vnutristvol'naya) Architechtronics VII
Pairs of Brain-grafting of the Nerves

Dissertation for candidate of a Medical Science degree. Leningrad "N.I.I." For Diseases of the Ears, Throat, and Nose, 1957

S-2

USSR / Human and Animal Morphology (Normal and Pathological). The Peripheral Nervous System.

Abs Jour: Ref Zhur-Biol., No 10, 1958, 45517.

Author : Skopina, E. L.
Inst : Saratov Medical Institute
Title : The Intracolumnar Architectonics of Eight Pairs of the Cranial Nerves.

Orig Pub: Tr. Saratovsk. med. in-ta, 1957, 9, 71-79.

Abstract: Details of the structure of the cochlear nerve (CN) and the vestibular nerve (VN) and their correlations were studied. Eighty cochlear and vestibular nerves of persons, perished in accidents or from diseases free of ear or brain pathology, were investigated. The nerves were extracted by a specially developed process and were treated with various histological methods. CN and VN possess a mixed type of structure. The union of

Card 1/2

SKOPINA, E.L.

Nose injuries and their forensic evaluation [with summary in English]. Vest.oto-rin. 19 no.6:51-55 N-D '57 (MIRA 11:3)

1. Iz kafedry bolezney ukha, gorla i nosa (zav.-prof. M.I.Vol'fkovich) i kafedry sudebnoy meditsiny (zav.-dotsent I.V.Skopin) Saratovskogo meditsinskogo instituta.
(NOSE, wds. and inj.
forensic evaluation)
(MEDICINE, LEGAL
forensic aspects of nose inj.)

SKOPINA, E.L. (Leningrad)

Intrafascicular structure and blood supply of branches of the cochlear and vestibular nerves [with summary in English]. Vest. oto-rin. 20 no.1:46-49 Ja-F '58. (MIRA 11:3)

1. Iz Leningradskogo nauchno-issledovatel'skogo instituta po boleznyam ukha, gorla, nosa i rechi (dir.-prof. I.A.Lopotko, nauchnyy rukovoditel'-deyatvitel'nyy chlen AMN SSSR prof. V.I. Voyachek).

(NERVES, VESTIBULAR
intrafascicular structure & blood supply (Rus)
(NERVES, COCHLEAR
same)

SKOPINA, E. L., kand. med. nauk

Etiology of some forms of henorrhage from the upper respiratory tract. Vest. otorin. no.5:5-9 '61. (MIRA 14:12)

1. Iz kafedry bolezney ukha, nosa i gorla (zav. - prof. M. I. Vol'fkovich) Saratovskogo meditsinskogo instituta.

(HEMORRHAGE) (RESPIRATORY SYSTEM--DISEASES)
(LIVER--DISEASES)

KLIMOVSKAYA, Z.A.; SKOPINA, I.N.

Color variation of the inflorescence in dahlias reproduced by seed. Trudy Alma-At.bot.sada 5:121-131 '60.
(MIRA 13:6)

(Alma-Ata--Dahlias--Varieties)
(Color of flowers)

SKOPINA, I.N.

Larvae of two species of Scarabaeidae (Coleoptera) from the Mangyshlak Peninsula. Zool. zhur. 43 no.5:772-773 '64 (MIRA 17:7)

1. Nauchno-issledovatel'skiy institut zashchity rasteniy, Alma-Ata.

SHEFTEL', I.T., kand.tekhn.nauk; SKOPINA, N.I., inzh.; FILIPPOVA, O.N., inzh.; CHEBOTAREVA, E.S., inzh.

Quick-response bead-type thermistors. Vest. elektroprom. 34 no.8:71-73 Ag '63. (MIRA 16:9)

(Thermistors)

SKOPINA, N. P., PETROVA, Z. F. and SYCHEVSKAYA, V. I.

"The Role of Sinanthropic Flies in Transmission of Dysentery Microbes and Eggs of the Dwarf Tapeworm in the City of Fergana."

Tenth Conference on Parasitological Problems and Diseases with Natural Reservoirs, 22-29 October 1959, Vol. II, Publishing House of Academy of Sciences, USSR, Moscow-Leningrad, 1959.

Uzbek Institute of Malaria and Medical Parasitology (Samarkand)

VINOGRAD-FINKEL', F.R.; SKOPINA, S.B.

Complications associated with transfusion of Rh incompatible blood and their prevention. Khirurgiia, Moskva no.3:74-75 Mar 51. (CLML 20:7)

VINOGRAD-FINKEL', F.R.; SKOPINA, S.B.

Complications associated with transfusion of Rh incompatible blood and their prevention. Khirurgiia, Moskva no.5:5-13 May 1951. (CLML 20:9)

1. Of the Central Order of Lenin Institute of Hematology and Blood Transfusion(Director--Prof. A.A. Bagdasarov, Corresponding Member of the Academy of Medical Sciences) of the Ministry of Public Health USSR.

BAGDASAROV, A.A., professor; VINOGRAD-FINKEL', E.R., professor; AKSENOVA, O.V.; BOGOYAVLENSKAYA, M.P.; BOLDYSHEVA, G.M.; RODINA, R.I.; SKOPINA, S.B. (Moskva)

Use of concentrated leukocyte in the treatment of chronic radiation sickness. Klin.med.33 no.6:28-40 Je '55. (MLRA 8:12)

1. Chlen-korrespondent AMN SSSR (for Bagdasarov)
(RADIATION SICKNESS, ther.
leukocytes)
(BLOOD TRANSFUSION,
leukocytes in ther. of radiation sickness)
(LEUKOCYTES, ther use
radiation sickness)

BAGDASAROV, A.A., professor; RUTBERG, R.A.; VINOGRAD-FINKEL', F.R.; TEHMNT'YEVA, E.I.; IMONTOVICH, V.A.; SKOPINA, S.B.; ABDULLAYEV, G.M.

Preparation of blood without stabilizers and leukocyte mass by means of cation exchanging sorbents for clinical blood transfusions. Probl. gemat. i perel. krovi 1 no.3:38-42 My-Je '56. (MLRA 10:1)

1. Iz TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - chlen-korrespondent AMN SSSR prof. A.A.Bagdasarov) Ministerstva zdravookhraneniya SSSR.

(BLOOD BANKS
blood without stabilizers & leukocyte mass prep. with cation exchange resins)
(ION EXCHANGE RESINS
cation exchange resins in prep. of blood without stabilizers of leukocyte mass)

SKoptsova, S. B.

USSR / Human and Animal Physiology (Normal and Pathological). F-4
Blood.

Abs Jour : Ref Zhur - Biologiya, No 13, 1958, No. 60204

Author : Bogdanov, A. A.; Tarasyeva, E. I.; Visogrod-Finkel', F. E.; Rzhevin, N. A.; Leontobich, V. A.; Skoptsova, S. B.

Inst :

Title : Not given

: Leukocyte Mass - A New Transfusion Medium

Orig Pub : V sb.: aktual. probl. gematol. i perelivaniya krovi. Vyp. 32, M. Medgiz, 1956, 23-33

Abstract : For obtaining a leukocyte mass (LM) from blood, prepared without a stabilizer (S) with the aid of isogene, pectinic acid, sodium pectinate (I) and intradex (II) were used for the sedimentation of erythrocytes (E). I were used for the sedimentation of erythrocytes (E). I in a concentration of 0.45 and II in 0.6 - 0.8% produced a separation of plasma with 70 - 90% leukocytes (L) in 30 - 45 minutes. From 450 ml. of donor's blood, about

Card 1/3

2 billion L were obtained. I and II did not produce any toxic reactions in rabbits. Patients responded favorably toward transfusions of LM, prepared with II. The sedimentation of blood in a horizontal position with a subsequent change to a vertical one, increased the separation rate of E from the plasma and L. For the maintenance of sterility, 0.025 g. of sodium sulfapyl and 0.0015 g. of rivanol was added to the colloidal sedimentation agents per 225 ml. of blood. The addition of 0.5% solution of glucose increased the leukocyte viability. During the first few days, 93 - 95% of L maintained their usual characteristics. By preserving the L with fibrinogen-containing plasma via the addition of glucose to the serum, in colloidal and even saline solution, a non-specific clumping occurred

Card 2/3

on the 3 - 5th day. The largest number of viable L was obtained by keeping them at 8 - 10°; at 18 - 27° L were rapidly destroyed. The metrophils degenerated the earliest (on the 10th day about 20% of them remained); the lymphocytes were the most viable. Phagocytic activity dropped sharply with the length of time of preservation. The ability to granulate the vital stain was preserved for a longer period; on the 10th day, it remained in 50% of the lymphocytes. Antiseptics did not affect the viability of the L. After removal of plasma the LM was placed into ampoules with ERK (Control Institute of Blood Transfusion) No 1. The transfusion was made from this ampoule by a stream with a reduced rate of speed. Moderate amounts of LM may be transfused with a siliconized syringe. The transfusion of LM within the first day produced no complications. -- A. D. Zelobovodova

Card 3/3

SKOPINA, S.B.; LAZAREVSKIY, S.A.

Study of the gas permeability of plastic blood bags. Probl. gemat. i perel. Krovi 8 no 9:16-17 S '63. (MIRA 17:9)

1. Iz laboratorii konservirovaniya krovi (zav. - prof. F.R.Vinograd-Finkel') i biokhimicheskoy laboratorii (zav. - prof. G.V.Derviz) TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir.- dotsent A.Ye.Kiselev) Ministerstva zdravookhraneniya SSSR.

VINOGRAD-FINKEL', F.R., prof.; SKOPINA, S.B.; BOLOTNIKOVA, F.I.; GLUZ, D.S.; FINNIKOVA, L.V.

Study of problems connected with the organization of mass preparation of sterile plastic bags with preservative for a two stage blood preservation. Probl. gemat. i perel. Krovi 8 no.9:23-29 S '63. (MIRA 17:9)

1. Iz TSentral'nogo ordena Lenina instituta gematologii i perelivaniya krovi (dir. - dotsent A.Ye.Kiselev) Ministerstva zdravookhraneniya SSSR, TSentral'nogo nauchno-issledovatel'skogo instituta konservnoy promysh'ennosti (dir. A.F.Namestnikov) pri Vyschem sovete narodnogo khozyaystva SSSR Soveta Ministrov SSSR i Khimiko-farmatsevticheskogo zavoda imeni N.A.Semashko (dir. V.I.Antipov).

SHPIL'KOV, Ye.M.; SULEYMENOV, S.T.; SKOPINA, V.D.

Effect of calcium and magnesium oxides on the course of obtaining foamglass from vitrophyres. Trudy Inst. stroi. i stroimat. AN Kazakh SSR 2:167-178 '59. (MIRA 12:10)
(Glass, Cellular)

KEL'MAN, V.M.; PEREGUD, B.P.; SKOPINA, V.I.

Universal precision β-spectrometer. Atom.energ. 10 no.5:534-536 My '61. (MIRA 14:5)

(Spectrometer)

GRIGOR'YEV, Ye. P.; PEREGUD, B. P.; SERGEYEV, V. O.; SKOPINA, V. I.

On Tu^{166} decay. Izv. AN SSSR. Ser. fiz. 16 no.12:1488-1491 D '62. (MIRA 16:1)

1. Fizicheskiy institut Leningradskogo gosudarstvennogo universiteta Fiziko-tekhnicheskogo instituta AN SSSR im. A. A. Zhdanova.

(Thulium—Decay)

S/048/62/026/012/007/016
B117/B186

AUTHORS: Grigor'yev, Ye. P., Peregud, B. P., Sergeyev, V. O., and Skopina, V. I.

TITLE: Decay of Tu^{166}

PERIODICAL: Akademiya nauk SSSR. Izvestiya. Seriya fizicheskaya, v. 26, no. 12, 1962, 1488 - 1491

TEXT: A check was carried out on the divergent statements on Tu^{166} decay in papers by Harmatz (B. Harmatz, T. H. Handley, J. W. Mihelich, Phys. Rev., 123, 1758 (1961)) and Grigor'yev (Ye. P. Grigor'yev, K. Ya. Gromov, B. S. Dzhelepov, Zh. T. Zhelev, V. Zvol'ska, I. Zvol'skiy, Izv. AN SSSR. Ser. Fiz., 25, 1217 (1961)). The quantum characteristics of the upper levels of Tu^{166} were determined more accurately. Experiments using a double focusing γ-prism spectrometer and a γ-scintillation spectrometer confirmed as correct the results obtained by Grigor'yev et al. for the energies of the transitions and for the relative intensities of the conversion lines. The two high levels with energies of 2134 and 2161 kev are heavily occupied when Tu^{166} captures electrons; their γ-transitions both take place to the

Card 1/2

Decay of Tu^{166}

same lower-lying level of Er^{166}. To determine their exact characteristics, the multipole orders of the γ-transitions with energies of 2054 and 2081 kev were calculated from the conversion coefficients α_K. It was shown that agreement between theoretical and experimental values is possible only if both transitions, or at least the one with an energy of 2054 kev, have a multipole order of M2. Transitions with an energy of 2054 kev take place from the 2134 kev energy level to the 2^+ level of the first rotational band. The 2134 kev energy level was assumed to have odd parity and, most probably, a spin of 3. This paper was read to the 12th Annual Conference on Nuclear Spectroscopy held in Leningrad from January 26 to February 2, 1962. There are 3 figures and 2 tables.

ASSOCIATION: Fizicheskiy institut Leningradskogo gos. universiteta (Physics Institute of the Leningrad State University); Fiziko-tekhnicheskiy institut Akademii nauk SSSR im. A. A. Zhdanova (Physicotechnical Institute of the Academy of Sciences USSR imeni A. A. Zhdanov)

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S/057/62/032/012/007/017
B104/B186

A precision prismatic spectrometer...

be varied over a range corresponding to electron energies from 30 to 2800 kev. The vacuum system comprises a vacuum chamber for the source, two tubelike vacuum chambers for the collimator lens and the focusing lens, a chamber for the deflecting magnet and another for the counters. Within an accuracy of 0.01%, a stabilizer keeps the current constant in a range from 0.02 to 3 a for 20 minutes. The electrons passing through the slit can be registered either by two G.M. counters working in coincidence or by counters placed at a distance of 750 mm from the slit. An automatic system controls the spectrometer according to a fixed program and records the results on a paper tape. There are 11 figures.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR, Leningrad (Physicotechnical Institute imeni A. F. Ioffe AS USSR, Leningrad)

SUBMITTED: July 18, 1962

Card 2/4

44213

S/057/62/032/012/008/017
B104/B186

AUTHORS: Kel'man, V. M., Peregud, B. P., and Skopina, V. I.

TITLE: A precision prismatic spectrometer. II. Resolving power, aperture ratio, accuracy of measuring energy and relative intensities

PERIODICAL: Zhurnal tekhnicheskoy fiziki, v.32, no. 12, 1962, 1465-1476

TEXT: The properties of a prismatic beta-spectrometer designed in the FTI imeni A. F. Ioffe AS USSR (Zhurnal tekhnicheskoy fiziki, v. 32, no. 12, 1962, 1446-1464) are described. The instrument is adjusted by means of the Ir^{192} conversion spectrum and an RdTh deposit, the rectangular source (1.5·15 mm) and rectangular slit (1.5·25 mm) being arranged symmetrically. The optimal instrument half-width is δ = 0.027% if source and slit are 1 mm wide, the resolving power is 0.036%, if the stated above adjustment is used. Characteristics are given in Table 1. The design of the vacuum system and of the source attachment makes it possible to vary the distance between the source and the center of the collimator lens from 121 cm down to 5 cm, thereby decreasing the focal length from 127 to 28 cm. If the

Card 1/4

A precision prismatic spectrometer...

aperture diaphragm is opened 9.9 cm the solid angle varies between 0.004 and 0.8% of 4π. If the source is brought closer to the lens, the lens current I_K and the angle φ_H through which the source must be turned in order to compensate for the rotation of the image by the magnet lenses both have to be altered (Fig. 3). In a range between 132 and 807 kev the mean line-width of the conversion spectrum lay between 0.15 and 0.21% if the source dimension was 0.6·15 mm, the source thickness 0.5 mg/cm^2 and the slit 2.5·40 mm. The aperture ratio was 0.4% of 4π in these measurements. The probable deviation ρ of the line-width lay between 1.7 and 15%. The electron momentum was calculated from the formula

$$Hρ = k\left(I_T + \frac{b}{k}\right) =$$
$$= k(I_T + I_0) = (3670 \pm 2)(I_T -$$
$$- 0.0025 \pm 0.0006),$$

where $H_ρ$ is given in oersteds·cm and I_T in amperes. The error of the

Card 2/4

A precision prismatic spectrometer...

relative intensities of the conversion lines lies between 0.01 and 0.8%. There are 5 figures and 6 tables.

ASSOCIATION: Fiziko-tekhnicheskiy institut im. A. F. Ioffe AN SSSR, Leningrad (Physicotechnical Institute imeni A. F. Ioffe AS USSR, Leningrad)

SUBMITTED: July 18, 1962

Fig. 3. I_K/I_o and $\varphi_и$ as function of the distance $\xi\phi$ between source and center of lens. Legend: (1) I_K/I_o, (2) $\varphi_и$.

Table 1. (a) symmetrical variant, (b) great aperture ratio, (1) focal length in cm, (2) dimensions of the aperture diaphragm in cm^2, (3) Ω in % of 4π, (4) source dimensions in mm, (6) aperture ratio, cm^2, (7) $\delta=\Delta(Hq)/(Hq)$, %.

Card 3/4

LEVENBERG, Semen Yakovlevich; [illegible], A.L., retsenzent; [illegible], red.

[Carpentry in everyday life] Stolyarnye raboty v bytu. Moskva, Legkaia industriia, 1965. 130 p. (MIRA 18:10)

ACC NR: AP7005682 SOURCE CODE: UR/0413/67/000/002/0156/0156

INVENTOR: Saksonov, Z. A.; Sankov, Ye. I.; Skopinov, A. P.; Shushpanov, Ye. A.

ORG: None

TITLE: An airtight hatch. Class 62, No. 190785

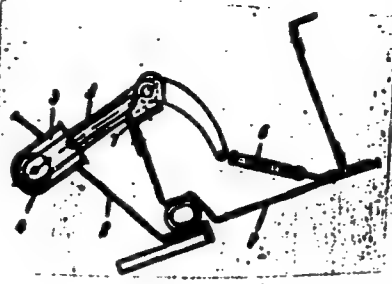
SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 2, 1967, 156

TOPIC TAGS: mechanical fastener, hermetic seal, auxiliary aircraft equipment, aircraft cargo handling

ABSTRACT: This Author's Certificate introduces: 1. An airtight hatch with possible application in an aircraft luggage carrier. The installation contains a frame with a cover which is opened by sliding it into the compartment and upward along its inner surface. The design also incorporates an elastic hermetic sealing element, guide rails and guide rollers fastened to the cover. Guide support pins are hinged to the lower edge of the cover to facilitate sliding into and out of the frame opening without bending and jamming. The free end of each pin is equipped with a roller which slides into a matching socket installed in the frame. 2. A modification of this hatch in which the guide support pins are spring loaded in the direction of motion of the hatch cover during closing. The pins come up against stops mounted in the cover when they reach the position at which the roller will slide into the socket.

Card 1/2 UDC: 629.13.012.21

ACC NR: AP7005682



1--hatch cover; 2--hatch frame; 3--pin; 4--roller; 5--socket; 6--spring; 7--stop

SUB CODE: 13/ SUBM DATE: 15Sep65

Card 2/2

KURKUMELI, A.A., inzh.; YAKOHSON, Yu.A., inzh.; SKOPINOV, Ye.N., inzh.; MOKHOVIKOV, Ye.V., inzh.

Machine for welding longitudinal welds of thin-walled shells and light-gauge sheets. Svar. proizv. no.9:34-35 S '64. (MIRA 17:12)

SKOPINOV, Ye.N., inzh.; KURKUMELI, A.A., inzh.; MOKHOVIKOV, Ye.V., inzh.

Universal stand for the automatic welding of longitudinal joints on shells and sheets. Svar.proizv. no.10:42 O '64. (MIRA 18:1)

L 57850-65 EWT(m)/EWA(d)/EWP(v)/EPR/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(c)
Pf-4/Ps-4 IJP(c) MJW/JD/HW
ACCESSION NR: AP5012644 UR/0135/65/000/005/0020/0021
621.791.752:669.715

AUTHOR: Kurkumeli, A. A. (Engineer); Samarin, V. I. (Engineer); Makutin, K. B. (Engineer); Skopinov, Ye. N. (Engineer)

TITLE: Automatic three-phase arc welding of AMg6 alloy under assembly conditions

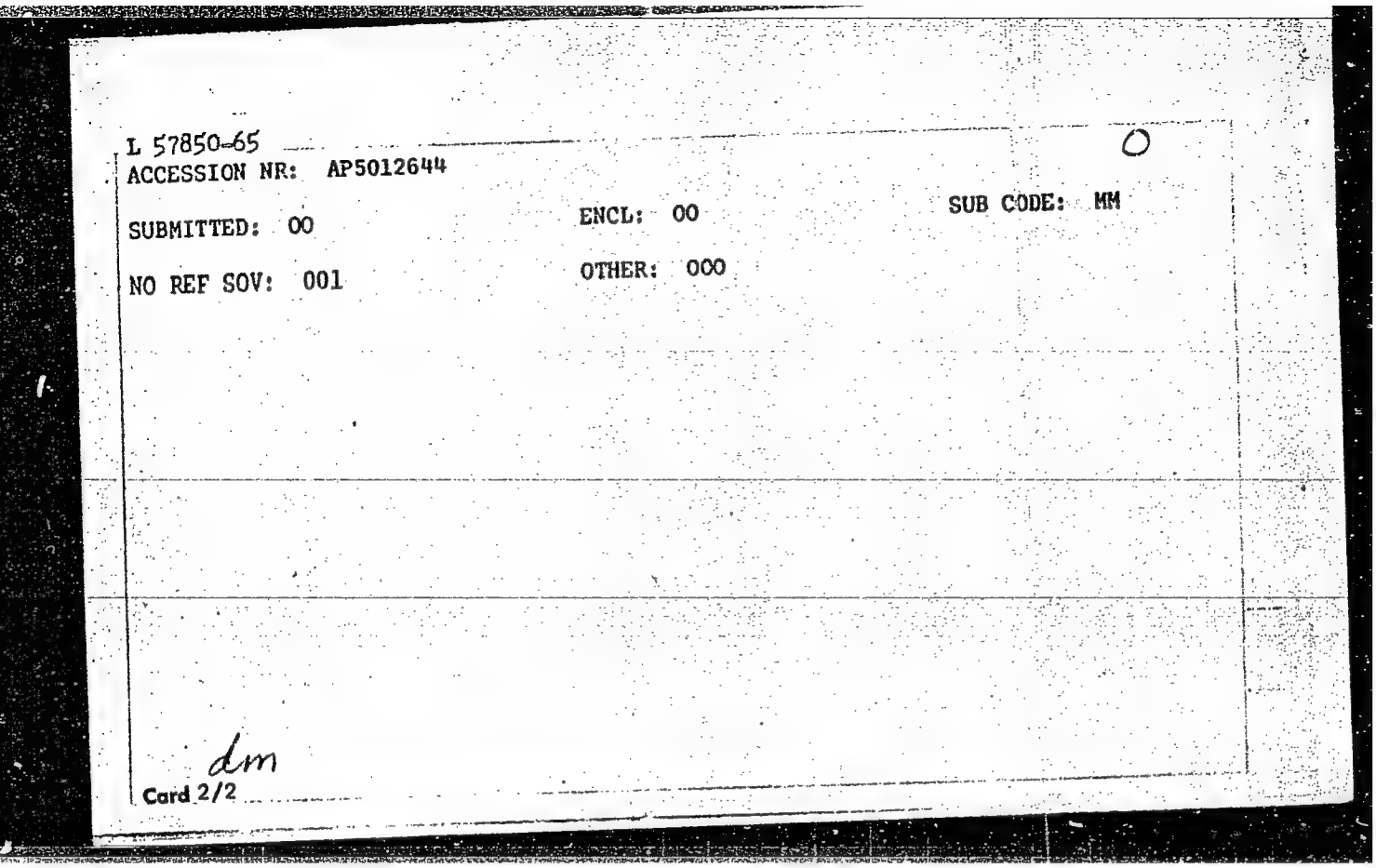
SOURCE: Svarochnoye proizvodstvo, no. 6, 1965, 20-21

TOPIC TAGS: butt welding, aluminum welding, arc welding

ABSTRACT: A description is given of the equipment and technology for three-phase arc welding of 12 mm-thick elements of AMg6 under assembly conditions. Data are presented which show that by using AMg5V welding rod instead of AMg6, weld joints can be obtained which have the same tensile strength but have higher ductility. Participants in these tests were Engineers E. N. Yenin and V. F. Zhul'kov, and Technician Yu. V. Beklenishchev. Orig. art. has: 3 figures, 2 tables.

ASSOCIATION: none

Card 1/2



L 57850-65
ACCESSION NR: AP5012644

SUBMITTED: 00 ENCL: 00 SUB CODE: MM

NO REF SOV: 001 OTHER: 000

dm

Card 2/2

KURKUMELI, A.A., inzh.; SAMARIN, V.I., inzh.; MAKUTIN, K.B., inzh.; SKOPINOV, Ye.N., inzh.

Automatic welding with a three-phase arc of the AMg6 alloy in assembly operations. Svar.proizv. no.5:20-21 My '65.

(MIRA 18:6)

SKOPINOVA, A., master sporta

On a signal from the ground. Kryl.rod. 12 no.5:13 My '61. (MIRA 14:7)

(Parachuting)

L 17830-65 EWT(m)/EWA(d)/EWP(v)/EWP(t)/EWP(k)/EWP(b) Pf-4 IJP(c) JD/
HM/HW

ACCESSION NR: AP4045725 S/0135/64/000/009/0034/0035

AUTHOR: Kurkumeli, A. A.(Engineer); Yakobson, Yu. A.(Engineer); Skupinov, Ye. N.(Engineer); Mokhovikov, Ye. V.(Engineer)

TITLE: Welder for longitudinal welding of thin-wall sections

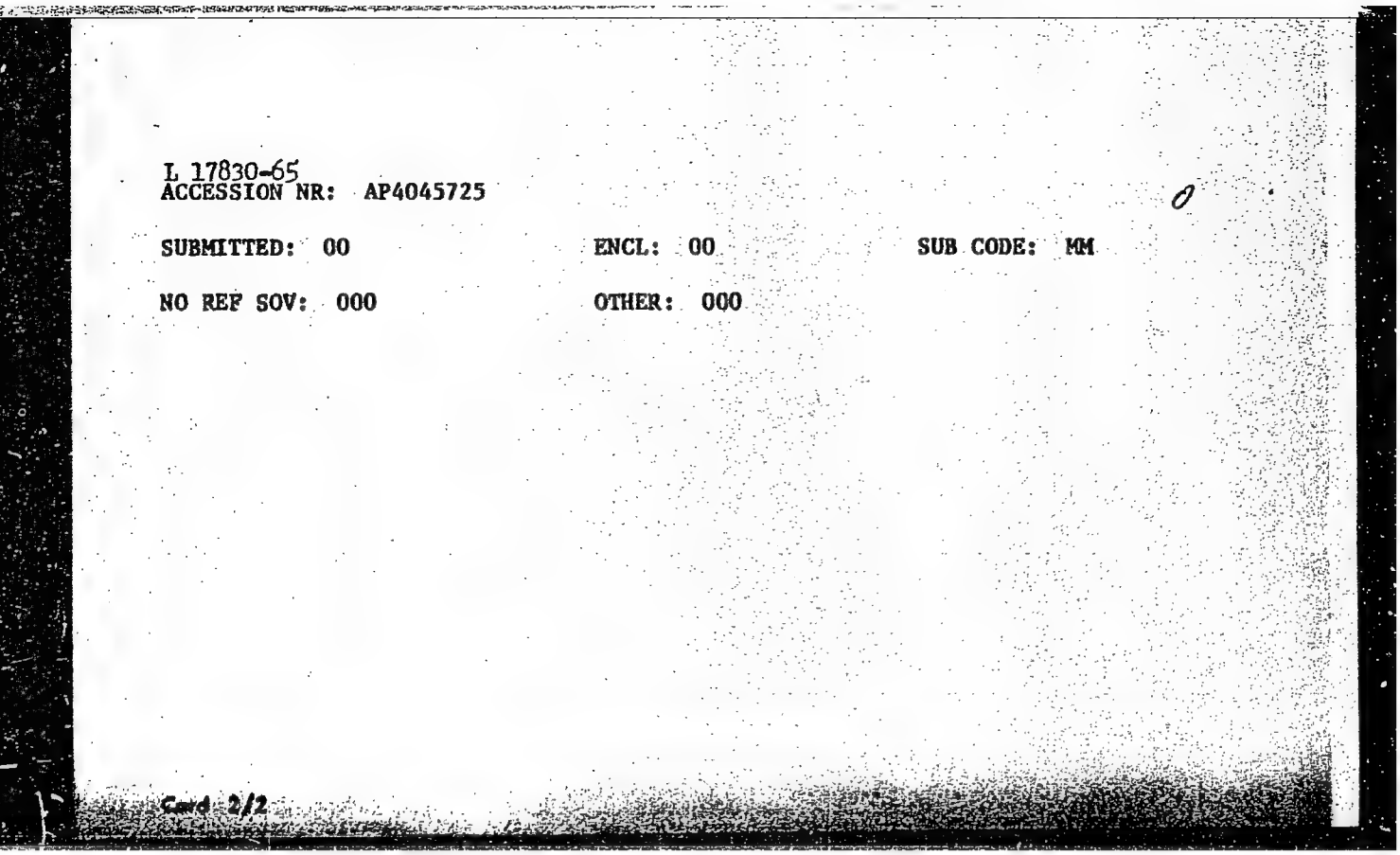
SOURCE: Svarochnoye proizvodstvo, no. 9, 1964, 34-35

TOPIC TAGS: thin section welding, thin sheet welding, thin sheet TIG welding, thin sheet MIG welding, TIg welding, MIG welding stainless steel welding, aluminum welding, titanium welding

ABSTRACT: A welder for automatic TIG or MIG welding of thin (0.5—2.00 mm) wall sections 250—1500 mm in diameter and up to 1800 mm long has been developed. The faying edges are clamped to a copper back-up bar by a series of key-like clamps, the uniform pressure of which is ensured by a pneumatic system. If necessary, an inert gas back-up can be used. The welder can be used for stainless steel, aluminum, titanium, and other sheet metal. Orig. art. has: 1 figure.

ASSOCIATION: none

Card 1/2



L 17830-65
ACCESSION NR: AP4045725

SUBMITTED: 00 ENCL: 00 SUB CODE: MM

NO REF SOV: 000 OTHER: 000

Card 2/2

CZYZ, Jerzy, arch; FURMAN, Jan, arch.; JOZEFOWICZ, Jerzy, arch.; SKOPINSKI, Andrzej, arch.; PANORSKI, Wlodzimierz, constr.; SZYMCZYK, Jan, constr.; BIENIEWSKI, Marek, modelist

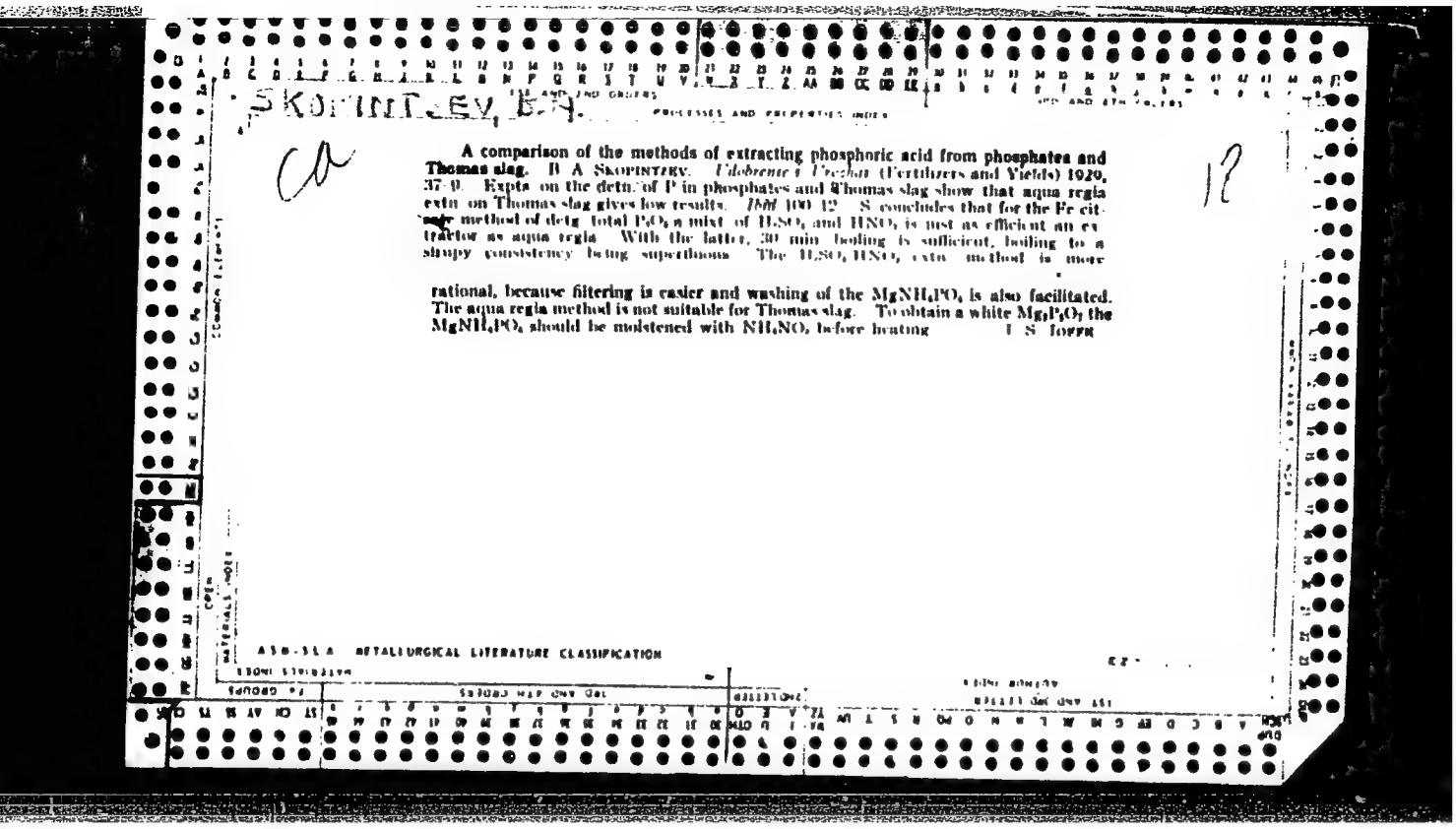
Contest for a shopping center. Architektura Pol no.10:379-383 '61.

SOSNOV, N.; RATANOVA, V.; FREYMAN, I.; MEN'SHOVA, L.; MARKIN, A.; NEPOKLONOV, A.; LEVCHENKO, Ye.; SKOPINSKIY, I.; ARKHIPOVA, Ye.

Disinfection of grain with methyl bromide in the ship's hold. Muk.-elev. prom. 26 no.10:12-14 O'60. (MIRA 13:10)
(Grain--Disinfection) (Methylene)

SKOPINSKIY, V.M., inzh.

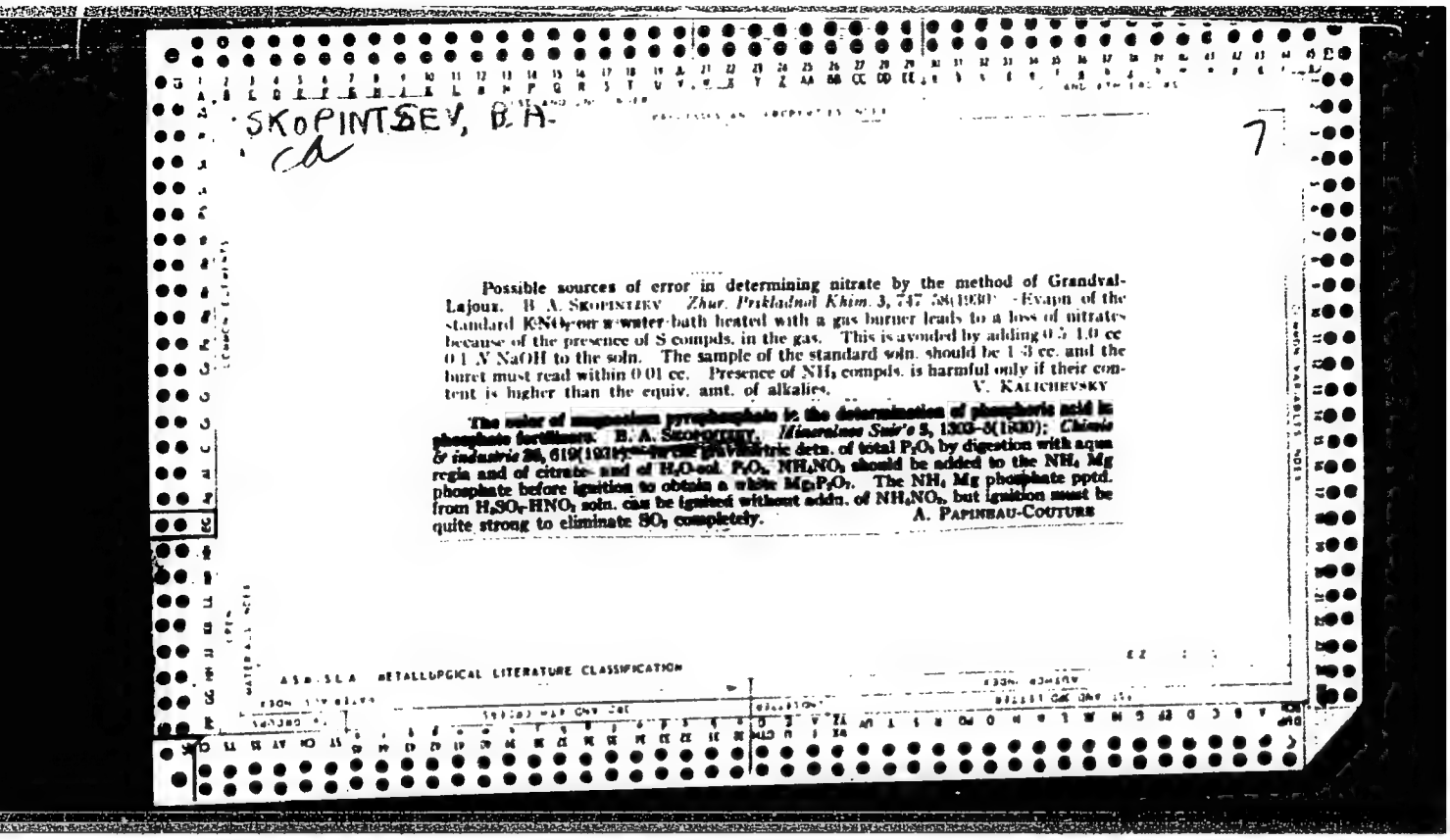
A factory of communist labor. Transp.stroi. 12 no.7:6-7 Jl '62.
(MIRA 16:2)
(Earthmoving machinery--Maintenance and repair)



SKOPINTSEV, B. A.

A comparison of the methods of extracting phosphoric acid from phosphates and Thomas slag. B A Skopintsev. *Udobrenie i Urozhai* (Fertilizers and Yields) 1929, 37-9. Expts on the detn of P in phosphates and Thomas slag show that aqua regia extn on Thomas slag gives low results. *Ibid* 100 12. S concludes that for the Fe citrate method of detg total P_2O_5 a mixt of H_2SO_4 and HNO_3 is just as efficient an extractor as aqua regia. With the latter, 30 min boiling is sufficient, boiling to a syrupy consistency being superfluous. The H_2SO_4, HNO_3 extn method is more rational, because filtering is easier and washing of the $MgNH_4PO_4$ is also facilitated. The aqua regia method is not suitable for Thomas slag. To obtain a white $Mg_2P_2O_7$ the $MgNH_4PO_4$ should be moistened with NH_4NO_3 before heating. I S Joffe

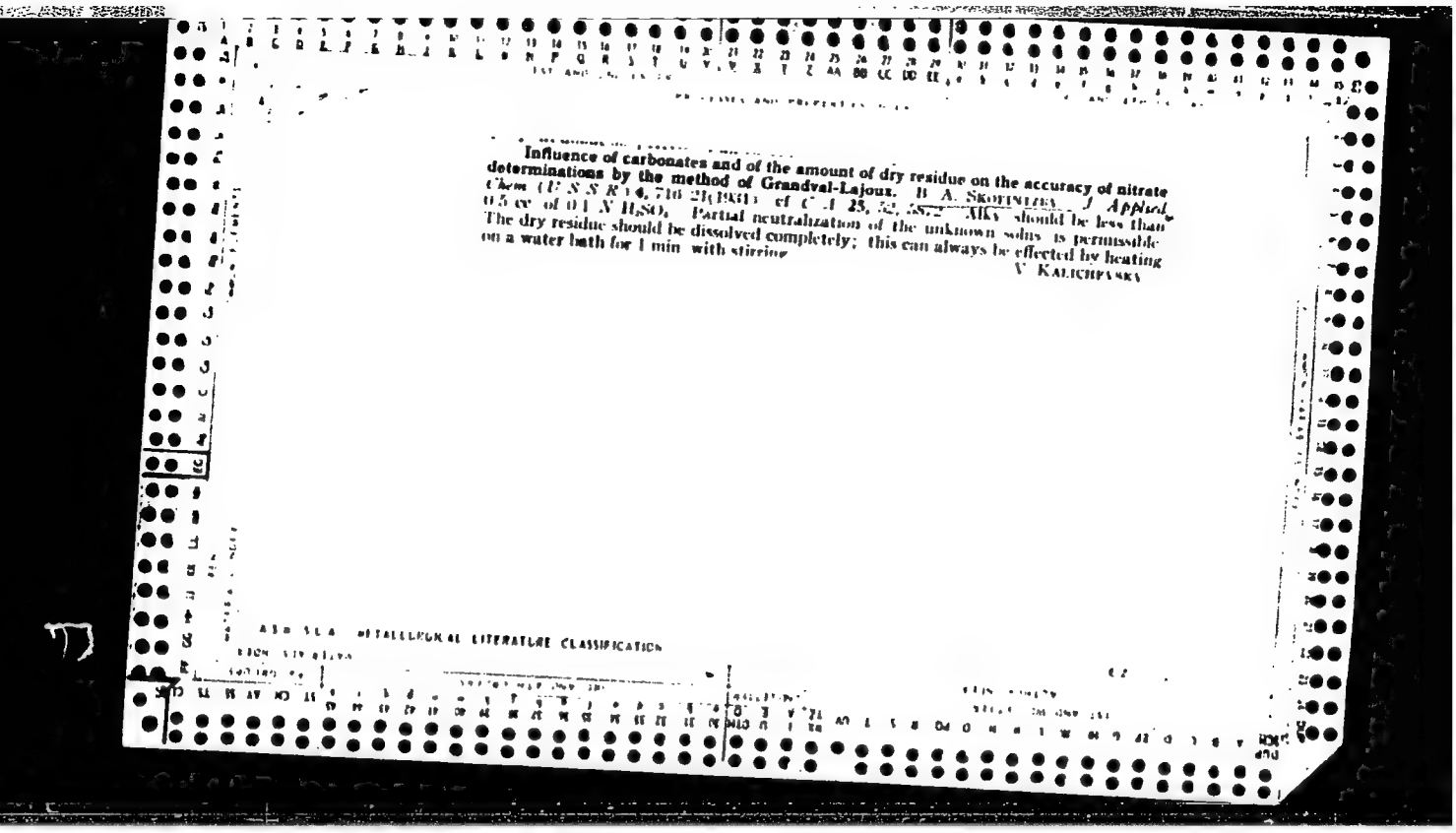
A58-51A METALLURGICAL LITERATURE CLASSIFICATION



SKOPINTSEV, B.A.

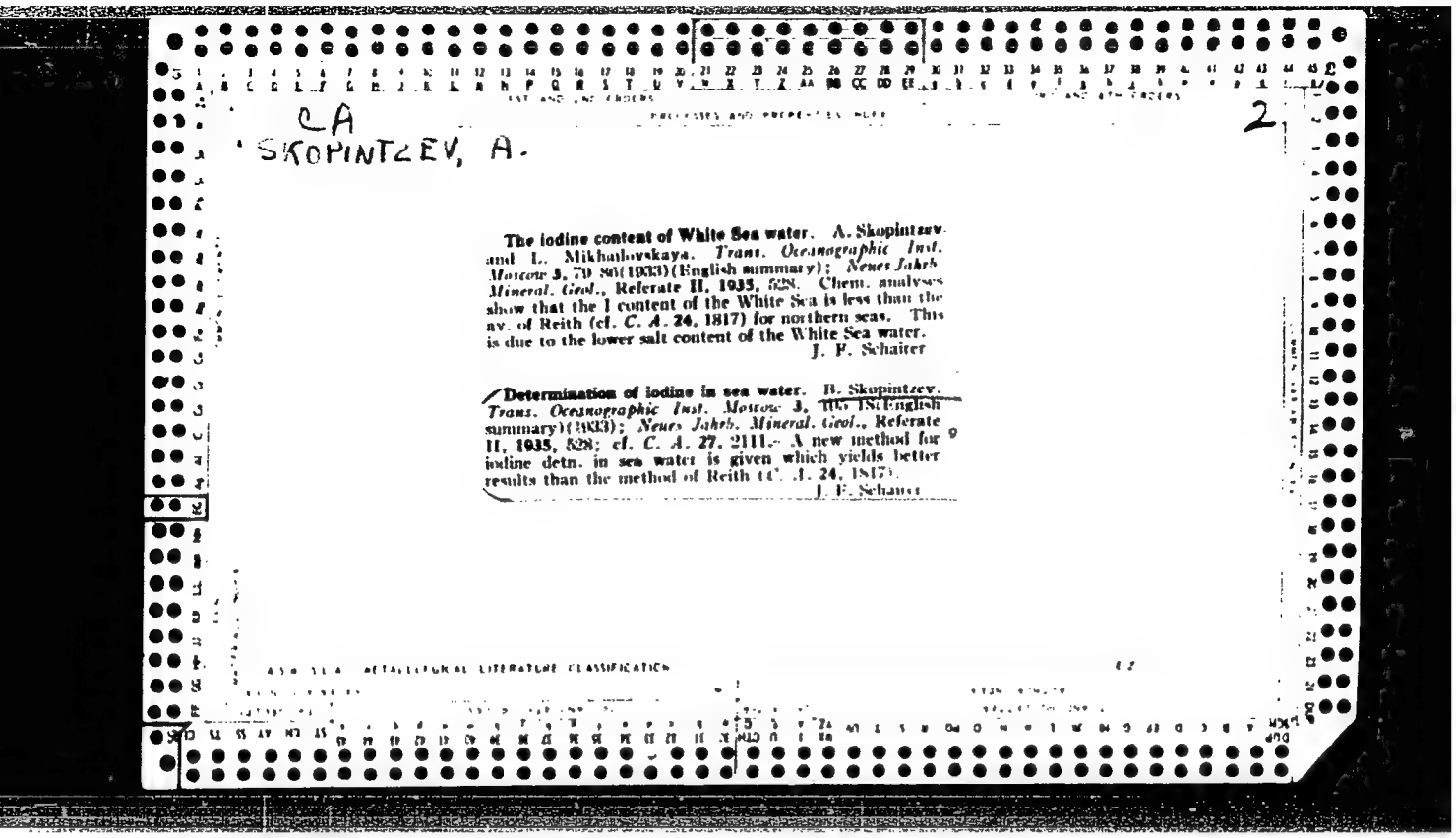
Possible sources of error in determining nitrate by the method of Grandval-Lajoux. B. A. Skopintsev. *Zhur. Prikladnoi Khim.* 3, 747-58(1930).—Evapn of the standard KNO_3 on a water bath heated with a gas burner leads to a loss of nitrates because of the presence of S compds. in the gas. This is avoided by adding 0.5–1.0 cc. 0.1 *N* NaOH to the soln. The sample of the standard soln. should be 1–3 cc. and the buret must read within 0.01 cc. Presence of NH_3 compds. is harmful only if their content is higher than the equiv. amt. of alkalies. V. Kalichevsky

The value of magnesium pyrophosphate in the determination of phosphoric acid in phosphate fertilizers. B. A. Skopintsev. *Mineralnoe Syrie* 5, 1303–8(1930); *Chimie & industrie* 26, 619(1931).—For the gravimetric detn. of total P_2O_5 by digestion with aqua regia and of citrate- and of H_2O-sol. P_2O_5, NH_4NO_3 should be added to the NH_4Mg phosphate before ignition to obtain a white $Mg_2P_2O_7$. The NH_4Mg phosphate pptd. from H_2SO_4-HNO_3 soln. can be ignited without addn. of NH_4NO_3, but ignition must be quite strong to eliminate SO_3 completely. A. Papineau-Couture



Influence of carbonates and of the amount of dry residue on the accuracy of nitrate determinations by the method of Grandval-Lajoux. B. A. SKOPINTSEV. *J. Applied Chem. (U.S.S.R.)* 4, 710-2(1931); cf. *C.A.* 25, 52, 2852.—Alks. should be less than 0.5 cc. of 0.1 *N* H_2SO_4. Partial neutralization of the unknown solns. is permissible. The dry residue should be dissolved completely; this can always be effected by heating on a water bath for 1 min. with stirring.

V. KALICHEVSKY



CA

SKOPINTZEV, A.

2

The iodine content of White Sea water. A. Skopintzev and L. Mikhailovskaya. *Trans. Oceanographic Inst. Moscow* **3**, 79–86 (1933) (English summary); *Neues Jahrb. Mineral. Geol.*, Referate II, 1935, 528. Chem. analyses show that the I content of the White Sea is less than the av. of Reith (cf. *C. A.* **24**, 1817) for northern seas. This is due to the lower salt content of the White Sea water.
J. F. Schaiter

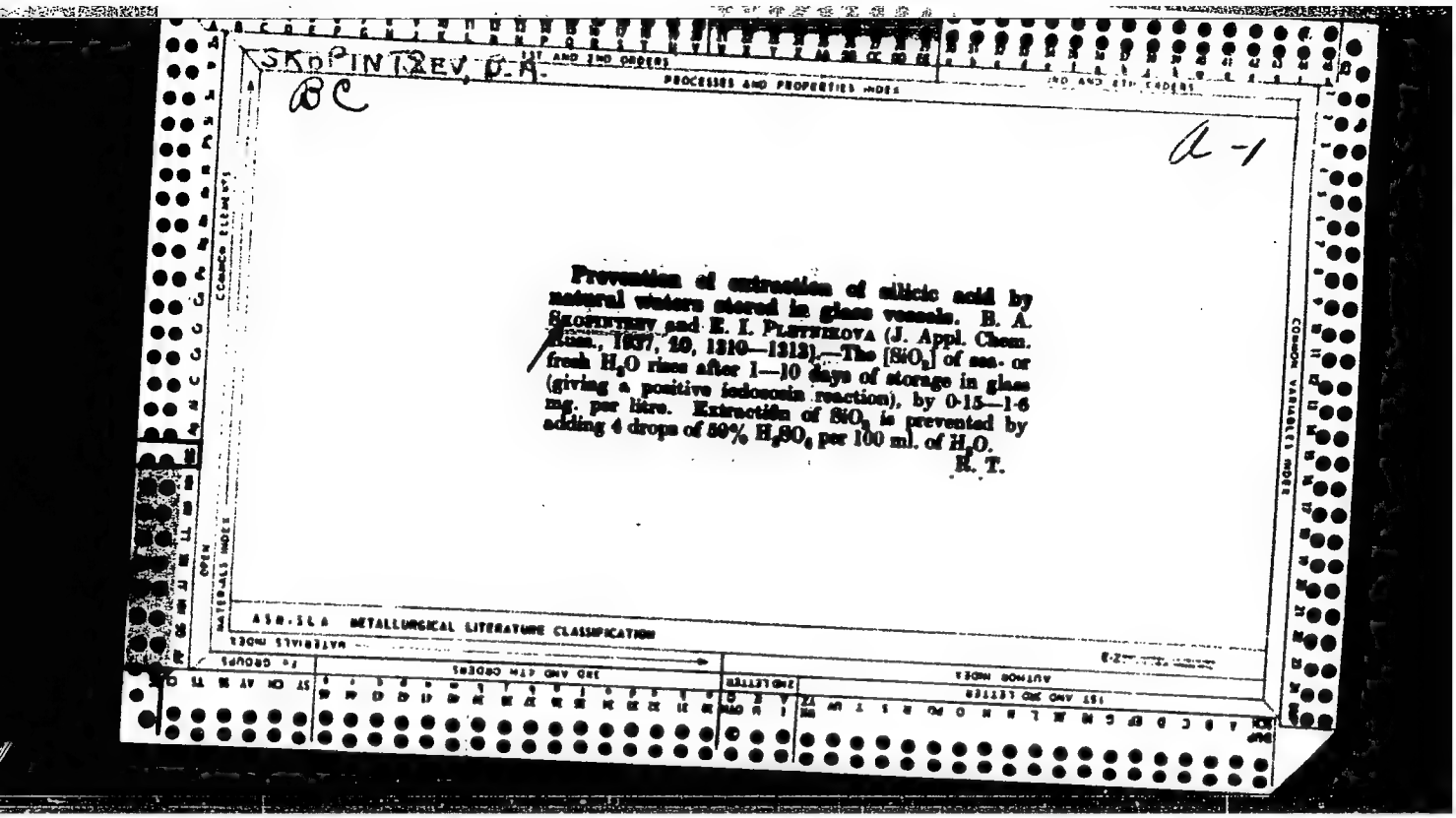
Determination of iodine in sea water. B. Skopintzev. *Trans. Oceanographic Inst. Moscow* **3**, 105–15 (English summary) (1933); *Neues Jahrb. Mineral. Geol.*, Referate II, 1935, 528; cf. *C. A.* **27**, 2111.– A new method for iodine detn. in sea water is given which yields better results than the method of Reith (*C. A.* **24**, 1817).
J. F. Schaiter

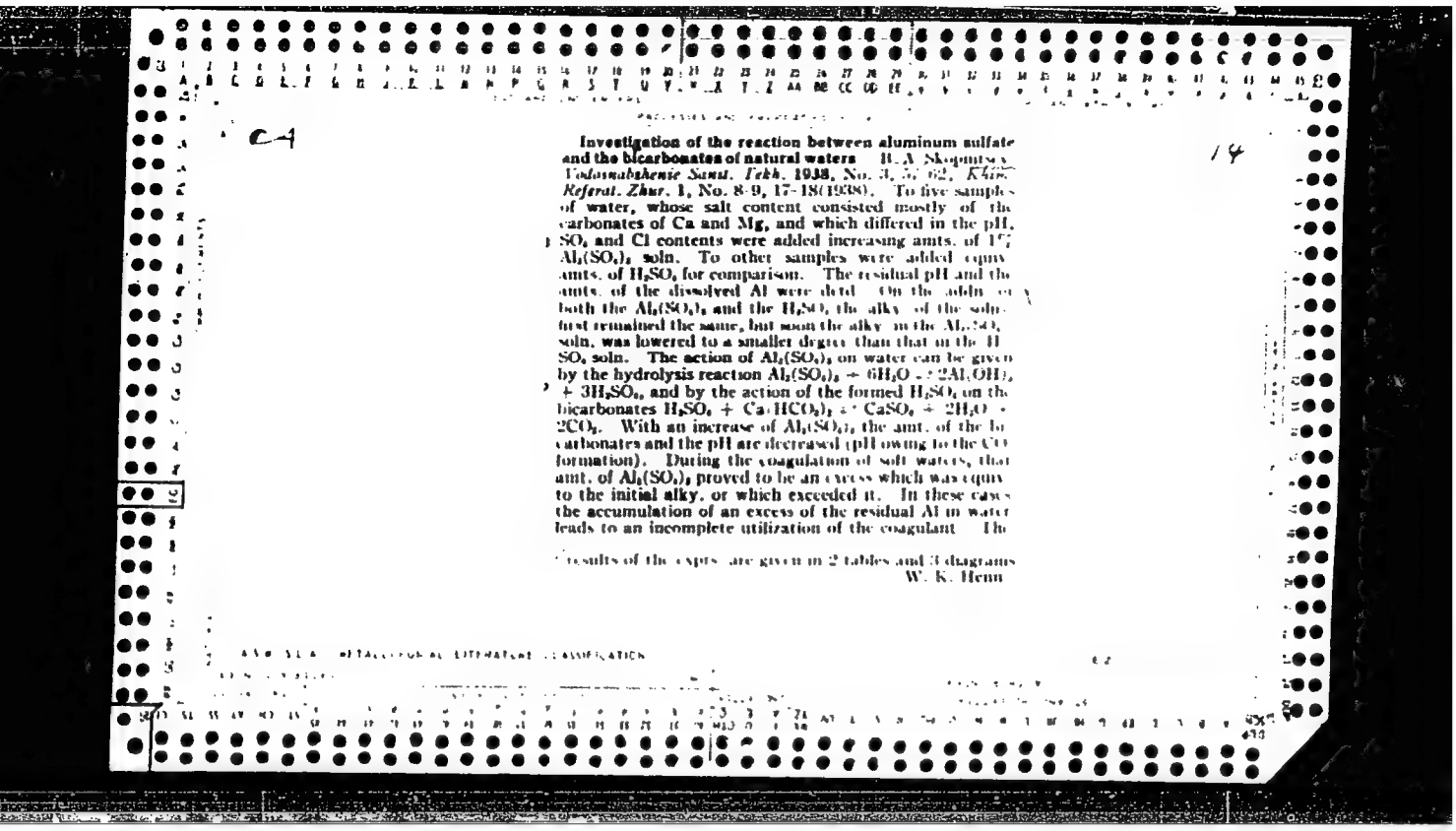
9

Skopantsev, B. A.

Determination of dissolved oxygen in water containing various oxidising and reducing substances. B. A. SKOPINTSEV and J. S. Ovtschinnikova (J. Appl. Chem. Russ., 1933, 6, 1173-1179) Winkler*s direct method (A., 1888, 79) is applicable to H_2O of a content of org. impurities (I) equiv. to $\geq$ 25 mg. of O_2 per litre, and containing $\geq$ 0.1 mg. of nitrite-N, 25 mg. of Fe , and 0·1 mg. of Cl per litre. H_2O containing $>$ the above content of (I) should be analysed by a combination of the above and Winkler*s I method (A., 1915, ii, 277).

R.T.

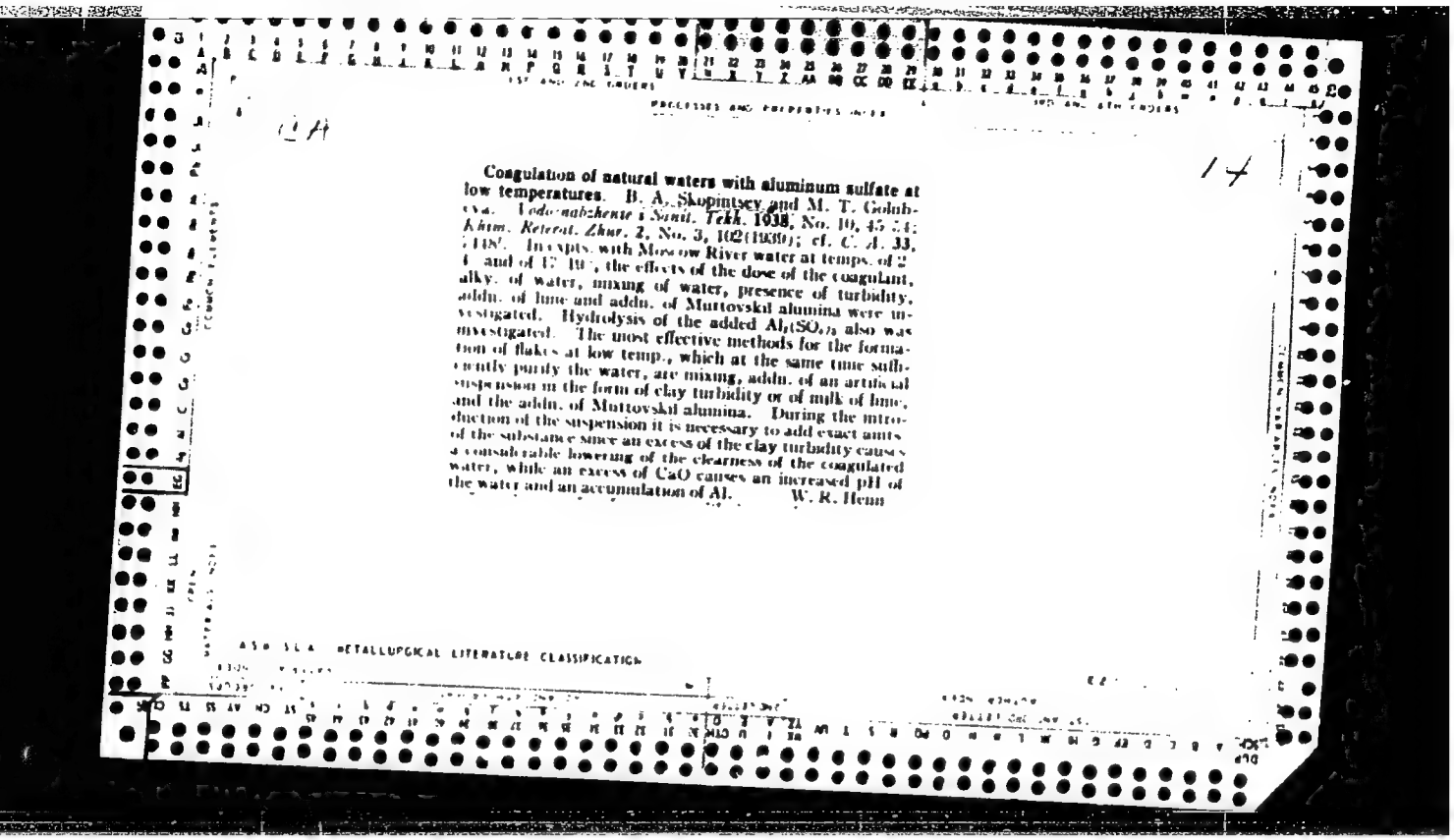




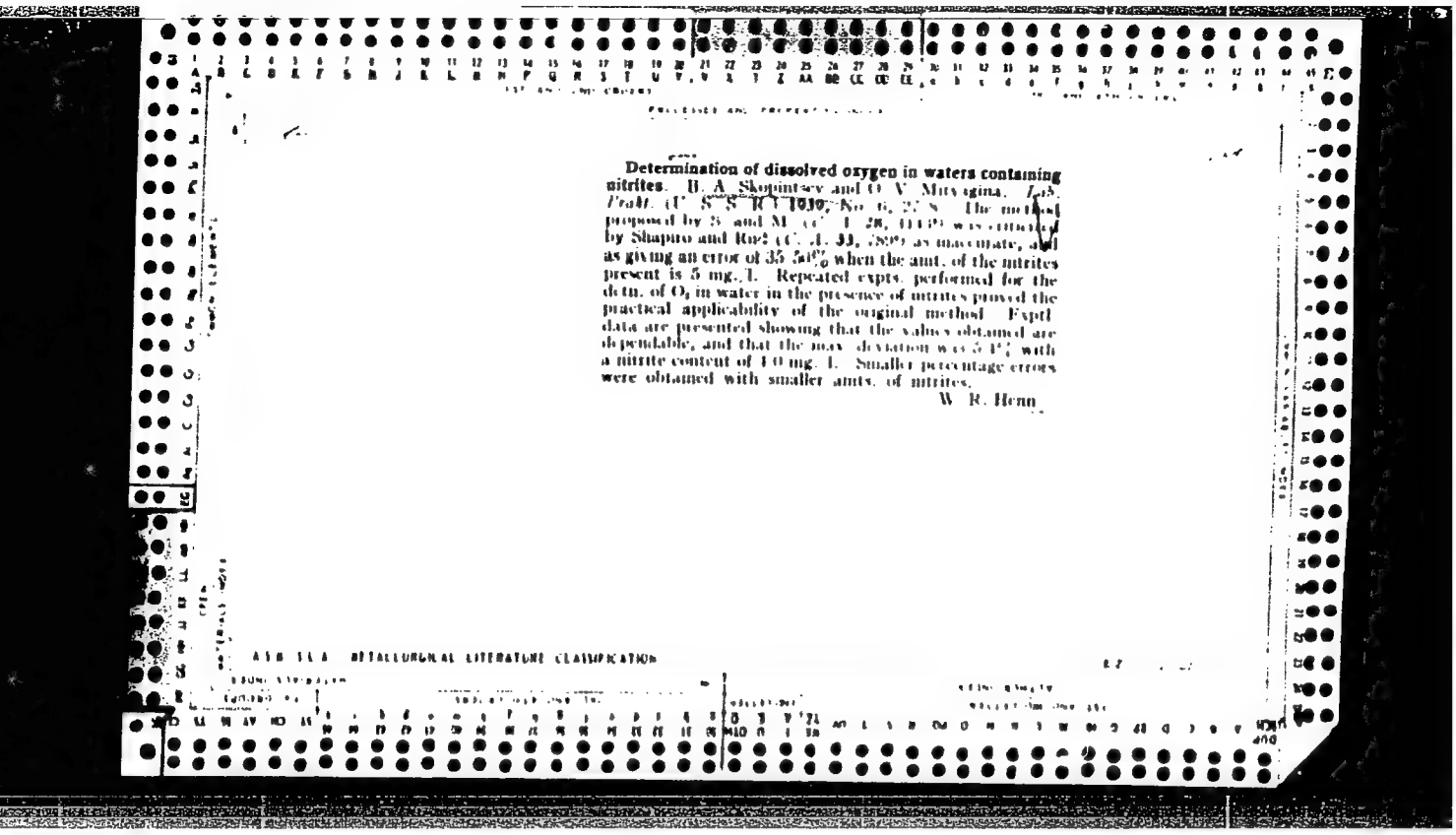
C-4

Investigation of the reaction between aluminum sulfate and the bicarbonates of natural waters B. A. Skopintsev *Vodosnabzhenie Sanit. Tekh.* 1938, No. 3, 5; 62; *Khim. Referat. Zhur.* 1, No. 8-9, 17-18(1938). To five samples of water, whose salt content consisted mostly of the carbonates of Ca and Mg, and which differed in the pH, SO_4 and Cl contents were added increasing amts. of 1% $Al_2(SO_4)_3$ soln. To other samples were added equiv. amts. of H_2SO_4 for comparison. The residual pH and the amts. of the dissolved Al were detd. On the addn. of both the $Al_2(SO_4)_3$ and the H_2SO_4, the alky. of the soln. first remained the same, but soon the alky. in the $Al_2(SO_4)_3$ soln. was lowered to a smaller degree than that in the H_2SO_4 soln. The action of $Al_2(SO_4)_3$ on water can be given by the hydrolysis reaction $Al_2(SO_4)_3 + 6H_2O \rightarrow 2Al(OH)_3 + 3H_2SO_4$, and by the action of the formed H_2SO_4 on the bicarbonates $H_2SO_4 + Ca(HCO_3)_2 \rightarrow CaSO_4 + 2H_2O + 2CO_2$. With an increase of $Al_2(SO_4)_3$ the amt. of the bicarbonates and the pH are decreased (pH owing to the CO_2 formation). During the coagulation of soft waters, that amt. of $Al_2(SO_4)_3$ proved to be an excess which was equiv. to the initial alky. or which exceeded it. In these cases the accumulation of an excess of the residual Al in water leads to an incomplete utilization of the coagulant. The results of the expts. are given in 2 tables and 3 diagrams.

W. K. Henn

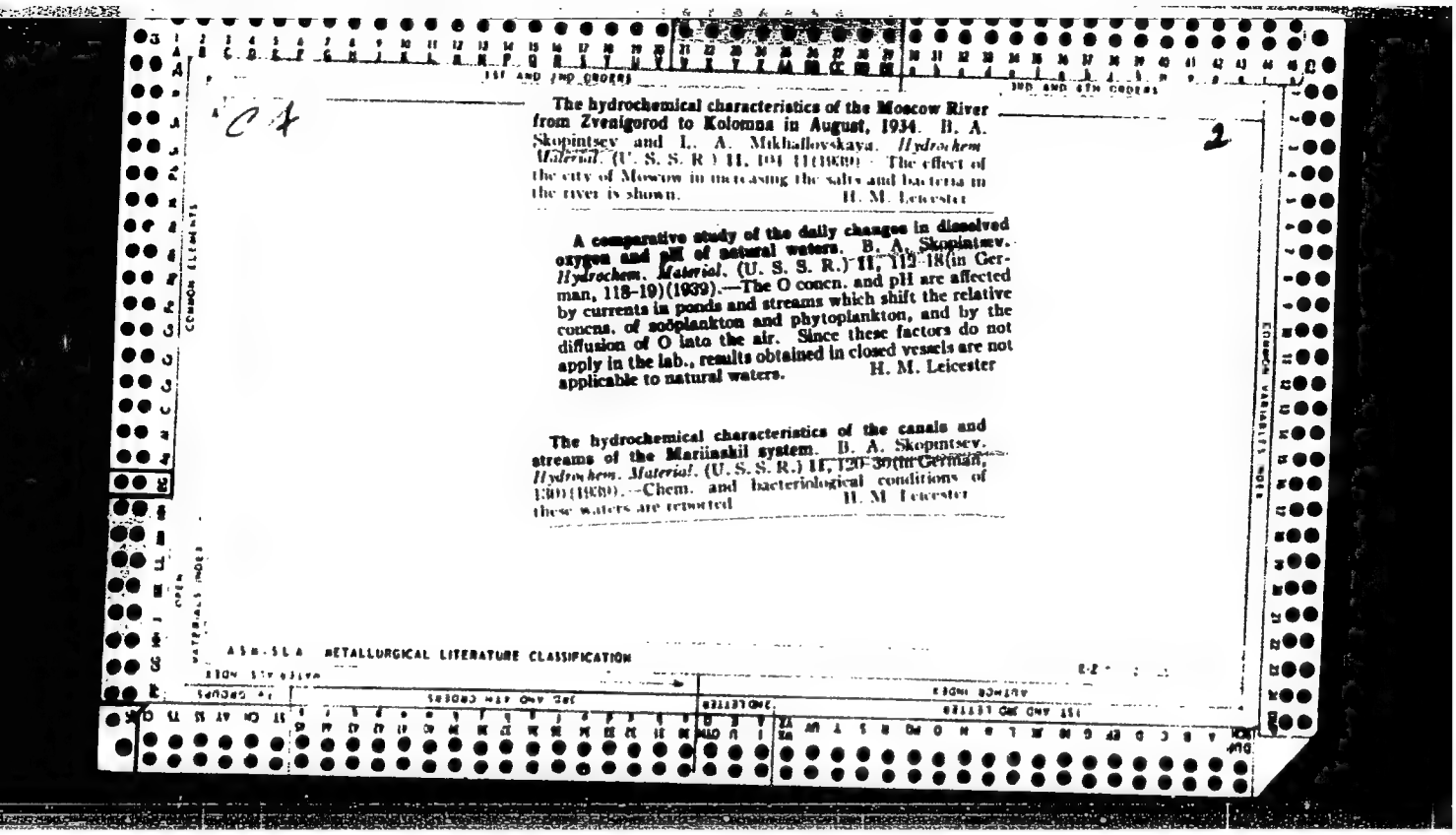


Coagulation of natural waters with aluminum sulfate at low temperatures. B. A. Skopintsev and M. T. Golubeva. *Vodosnabzhenie i Sanit. Tekh.* 1938, No. 10, 45-54; *Khim. Referat. Zhur.* 2, No. 3, 102(1939); cf. *C. A.* 33, 4108. In expts. with Moscow River water at temps. of 2° and of 17-19°, the effects of the dose of the coagulant, alky. of water, mixing of water, presence of turbidity, addn. of lime and addn. of Muttovskii alumina were investigated. Hydrolysis of the added $Al_2(SO_4)_3$ also was investigated. The most effective methods for the formation of flakes at low temp., which at the same time sufficiently purify the water, are mixing, addn. of an artificial suspension in the form of clay turbidity or of milk of lime, and the addn. of Muttovskii alumina. During the introduction of the suspension it is necessary to add exact amts. of the substance since an excess of the clay turbidity causes a considerable lowering of the clearness of the coagulated water, while an excess of CaO causes an increased pH of the water and an accumulation of Al. W. R. Henn



Determination of dissolved oxygen in waters containing nitrites. B. A. Skopintsev and O. V. Mitrygina. *Zavodskaya Lab.* (U. S. S. R.) 1950, No. 6, 727-8. The method proposed by S. and M. (*C. A.* 1928, 1143) was criticized by Shapiro and Ruf (*C. A.* 33, 7809) as inaccurate, and as giving an error of 35.5% when the amt. of the nitrites present is 5 mg./l. Repeated expts. performed for the detn. of O_2 in water in the presence of nitrites proved the practical applicability of the original method. Expt'l. data are presented showing that the values obtained are dependable, and that the max. deviation was 5.4% with a nitrite content of 1.0 mg./l. Smaller percentage errors were obtained with smaller amts. of nitrites.

W. R. Henn



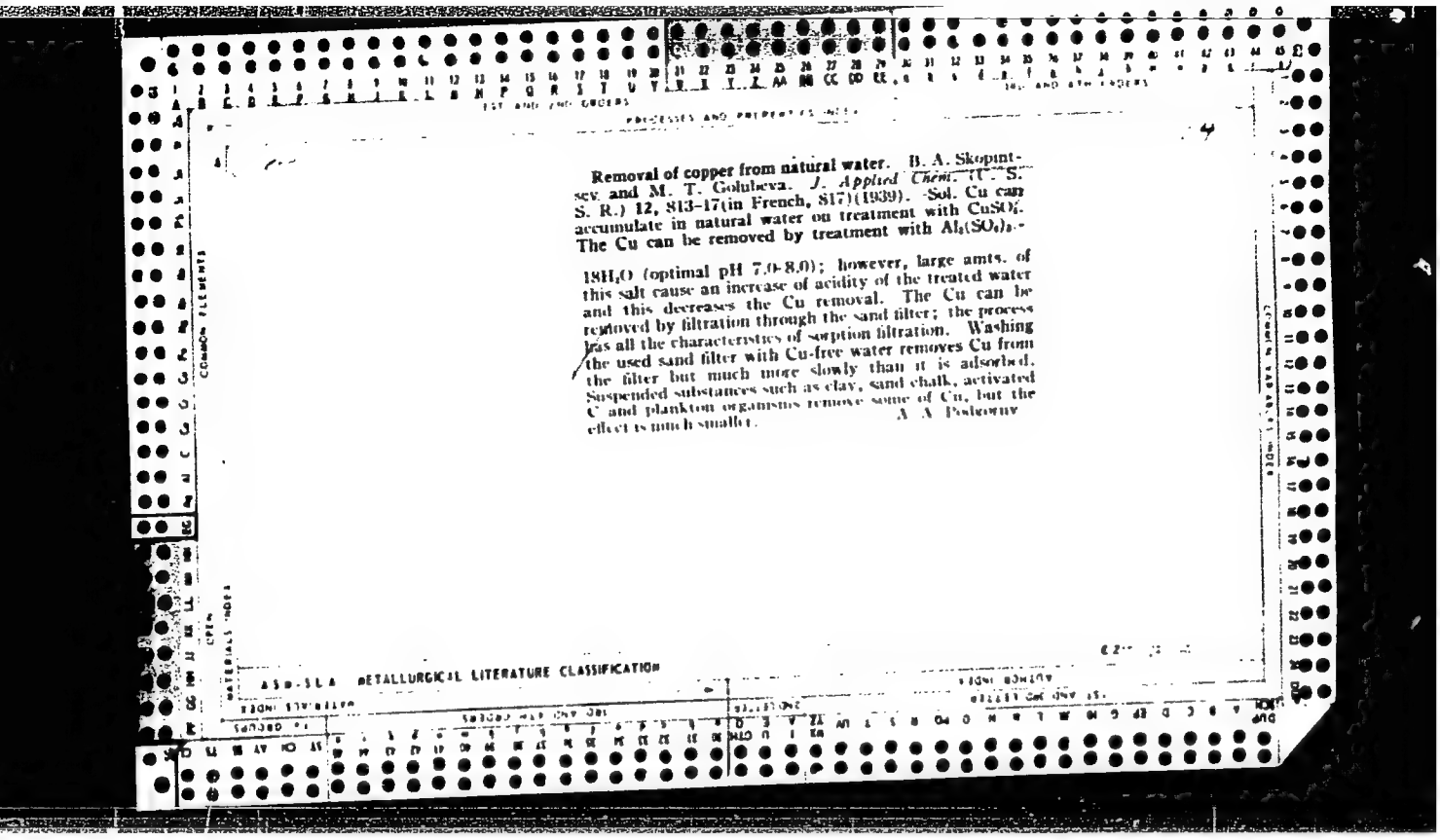
C4

2

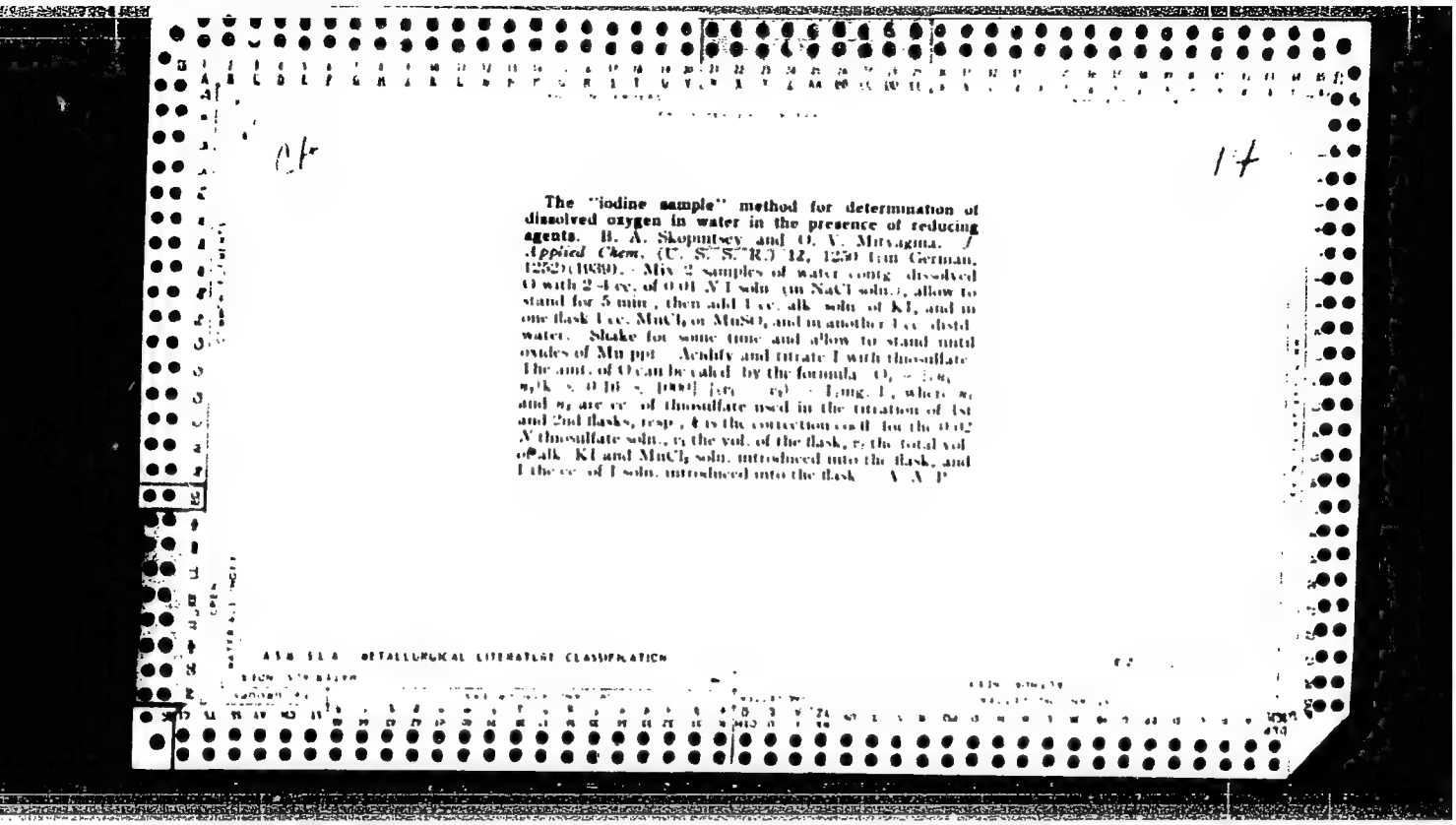
The hydrochemical characteristics of the Moscow River from Zvenigorod to Kolomna in August, 1934. B. A. Skopintsev and L. A. Mikhailovskaya. *Hydrochem. Material.* (U. S. S. R.) II, 104 (1939). The effect of the city of Moscow in increasing the salts and bacteria in the river is shown. H. M. Leicester

A comparative study of the daily changes in dissolved oxygen and pH of natural waters. B. A. Skopintsev. *Hydrochem. Material.* (U. S. S. R.) II, 112–18 (in German, 118–19) (1939).—The O concn. and pH are affected by currents in ponds and streams which shift the relative concns. of zooplankton and phytoplankton, and by the diffusion of O into the air. Since these factors do not apply in the lab., results obtained in closed vessels are not applicable to natural waters. H. M. Leicester

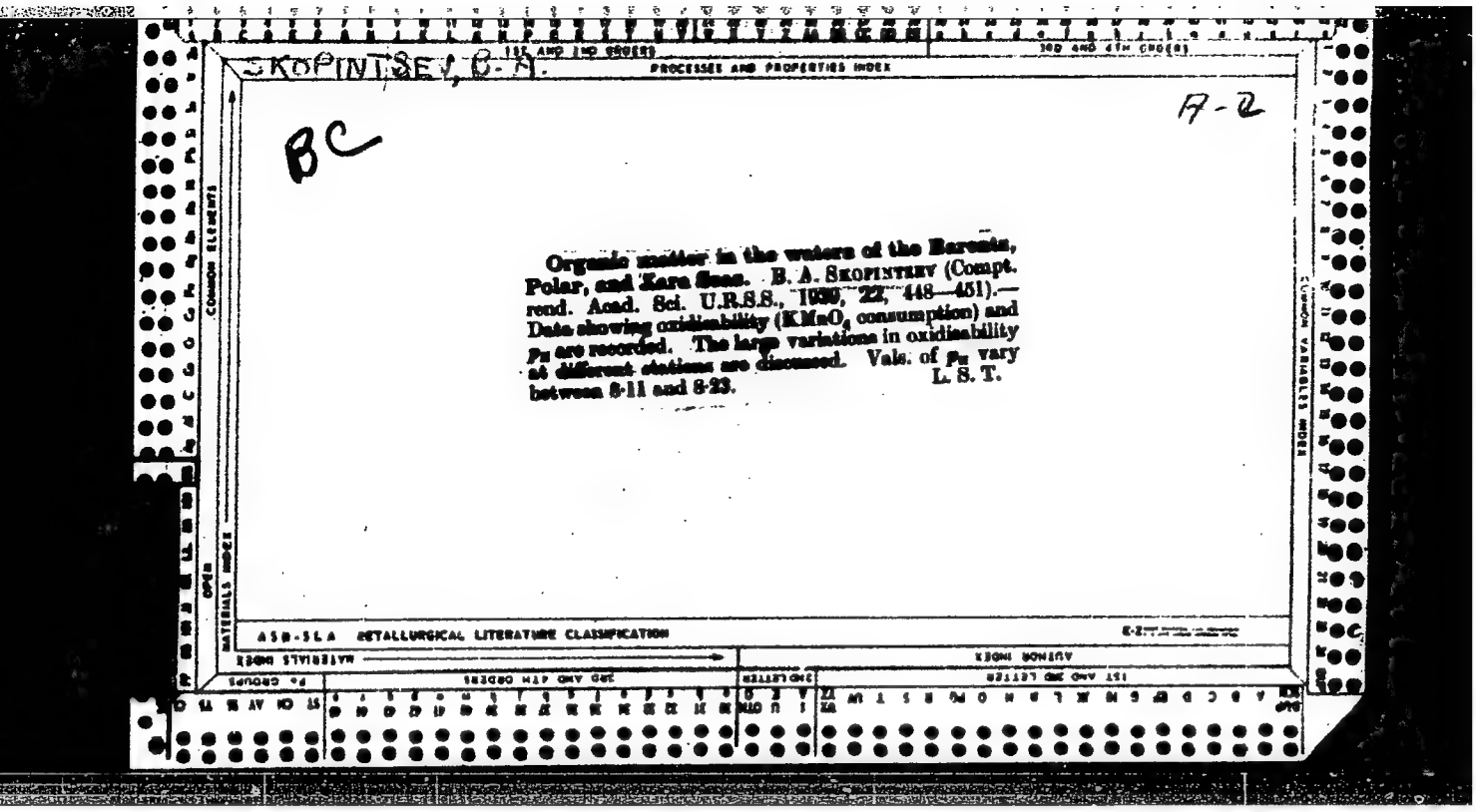
The hydrochemical characteristics of the canals and streams of the Mariinskii system. B. A. Skopintsev. *Hydrochem. Material.* (U. S. S. R.) II, 120–30 (in German, 130) (1939).—Chem. and bacteriological conditions of these waters are reported. H. M. Leicester



Removal of copper from natural water. B. A. Skopintsev and M. T. Golubeva. *J. Applied Chem. (U. S. S. R.)* 12, 813–17(in French, 817)(1939). Sol. Cu can accumulate in natural water on treatment with $CuSO_4$. The Cu can be removed by treatment with $Al_2(SO_4)_3 \cdot 18H_2O$ (optimal pH 7.0–8.0); however, large amts. of this salt cause an increase of acidity of the treated water and this decreases the Cu removal. The Cu can be removed by filtration through the sand filter; the process has all the characteristics of sorption filtration. Washing the used sand filter with Cu-free water removes Cu from the filter but much more slowly than it is adsorbed. Suspended substances such as clay, sand chalk, activated C and plankton organisms remove some of Cu, but the effect is much smaller. A. A. Pokrovny



The "iodine sample" method for determination of dissolved oxygen in water in the presence of reducing agents. B. A. Skopintsev and O. V. Mirvagina. *Zhur. Prikladnoi Khim.* (*J. Applied Chem.* (U. S. S. R.)) 12, 1250–1 (in German, 1252) (1939). — Mix 2 samples of water contg. dissolved O with 2–4 cc. of 0.01 *N* I soln. (in NaCl soln.), allow to stand for 5 min., then add 1 cc. alk. soln. of KI, and in one flask 1 cc. $MnCl_2$ or $MnSO_4$, and in another 1 cc. distd. water. Shake for some time and allow to stand until oxides of Mn ppt. Acidify and titrate I with thiosulfate. The amt. of O can be calcd. by the formula $O_2 = [(a_1 - a_2)k \times 0.16 \times 1000]/(v_1 - v_2) - 1$ mg. l., where a_1 and a_2 are cc. of thiosulfate used in the titration of 1st and 2nd flasks, resp., k is the correction coeff. for the 0.02 *N* thiosulfate soln., v_1 the vol. of the flask, v_2 the total vol. of alk. KI and $MnCl_2$ soln. introduced into the flask, and 1 the cc. of I soln. introduced into the flask. V. A. P.



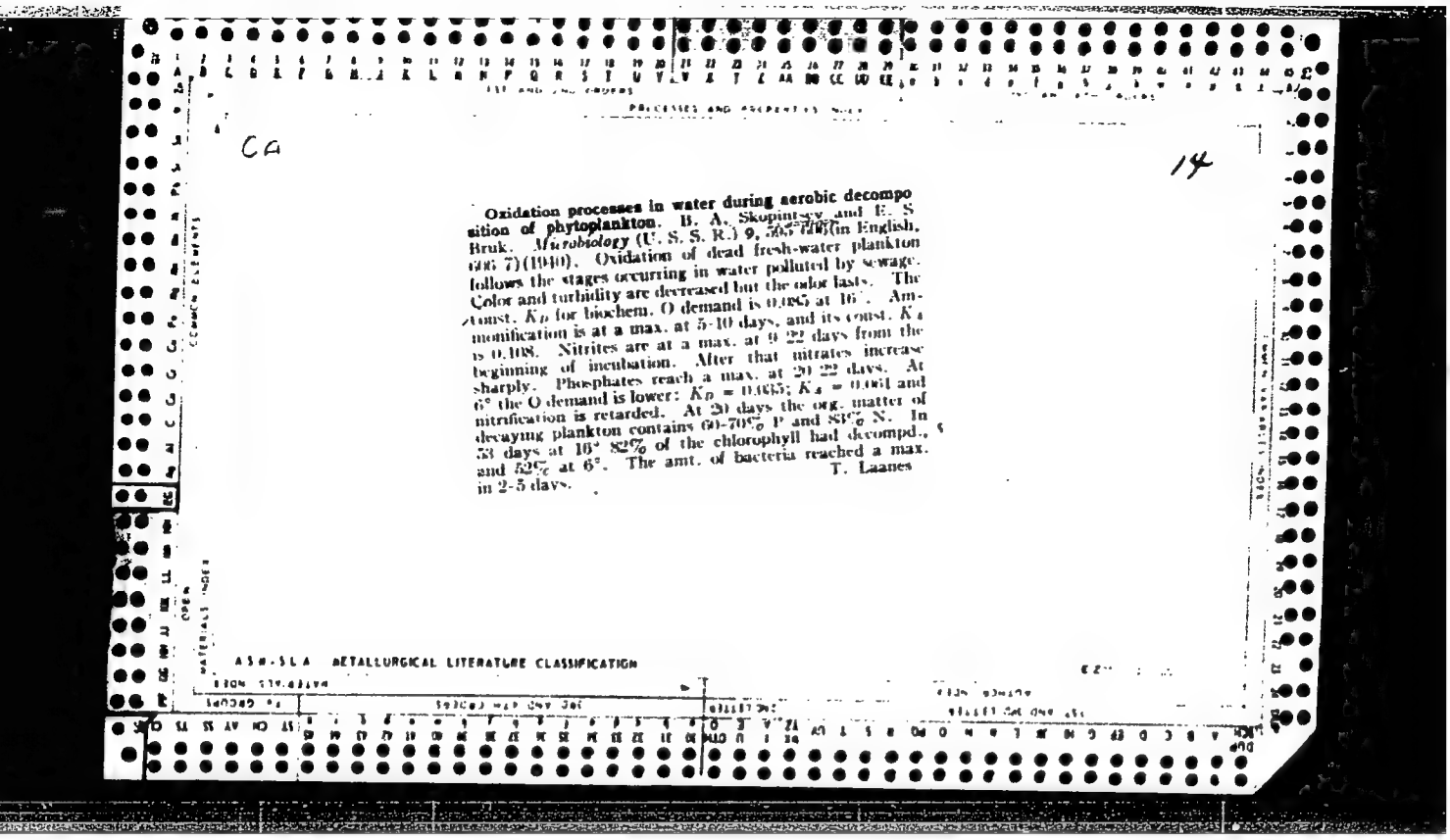
SKOPINTSEV, B. A.

BC

A-2

Organic matter in the waters of the Barents, Polar, and Kara Seas. B. A. Skopintsev (Compt. rend. Acad. Sci. U.R.S.S., 1950, 22, 448–451).—Data showing oxidisability ($KMnO_4$ consumption) and P_H are recorded. The large variations in oxidisability at different stations are discussed. Vals. of P_H vary between 8·11 and 8·23.

L. S. T.



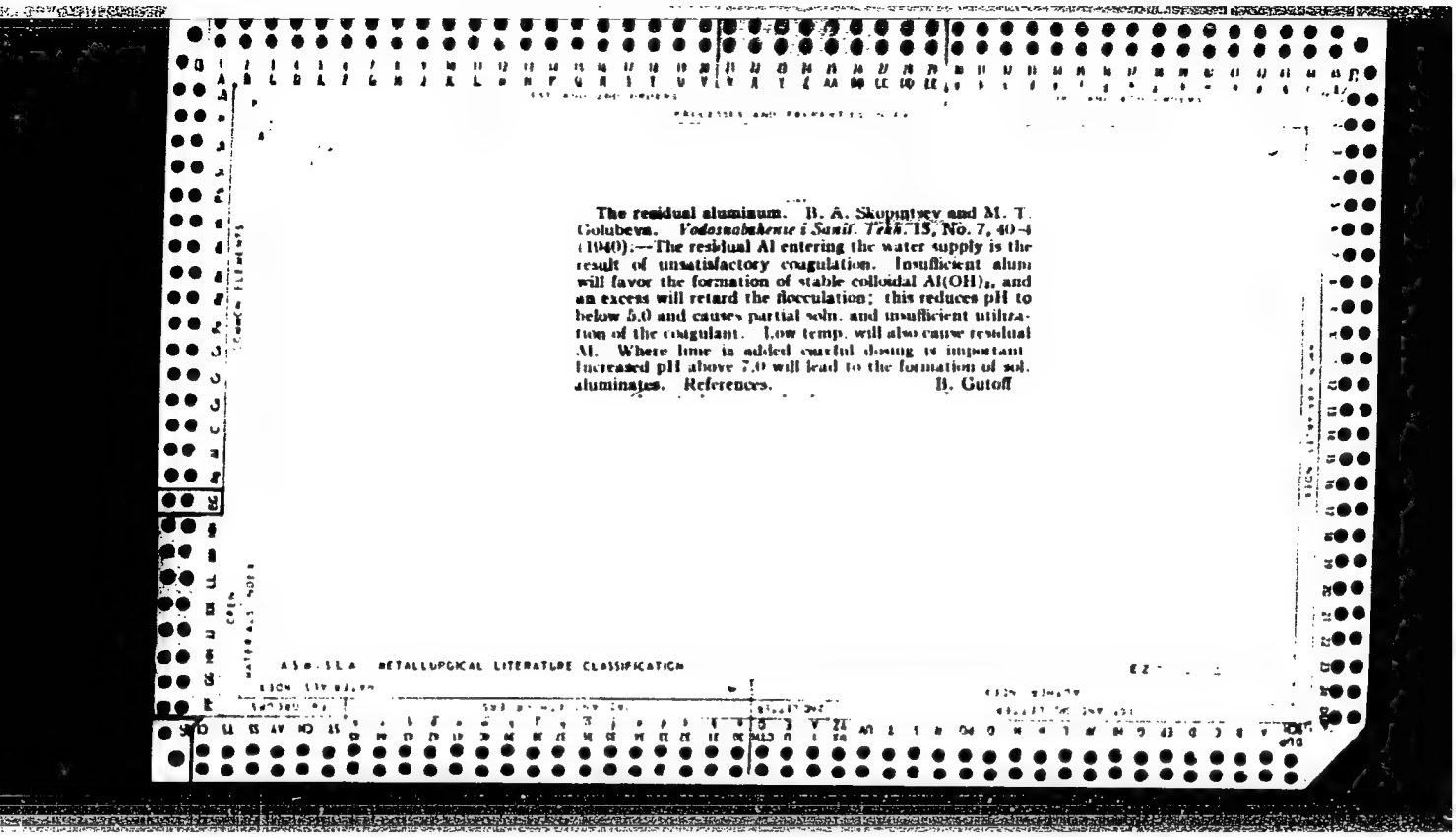
CA

14

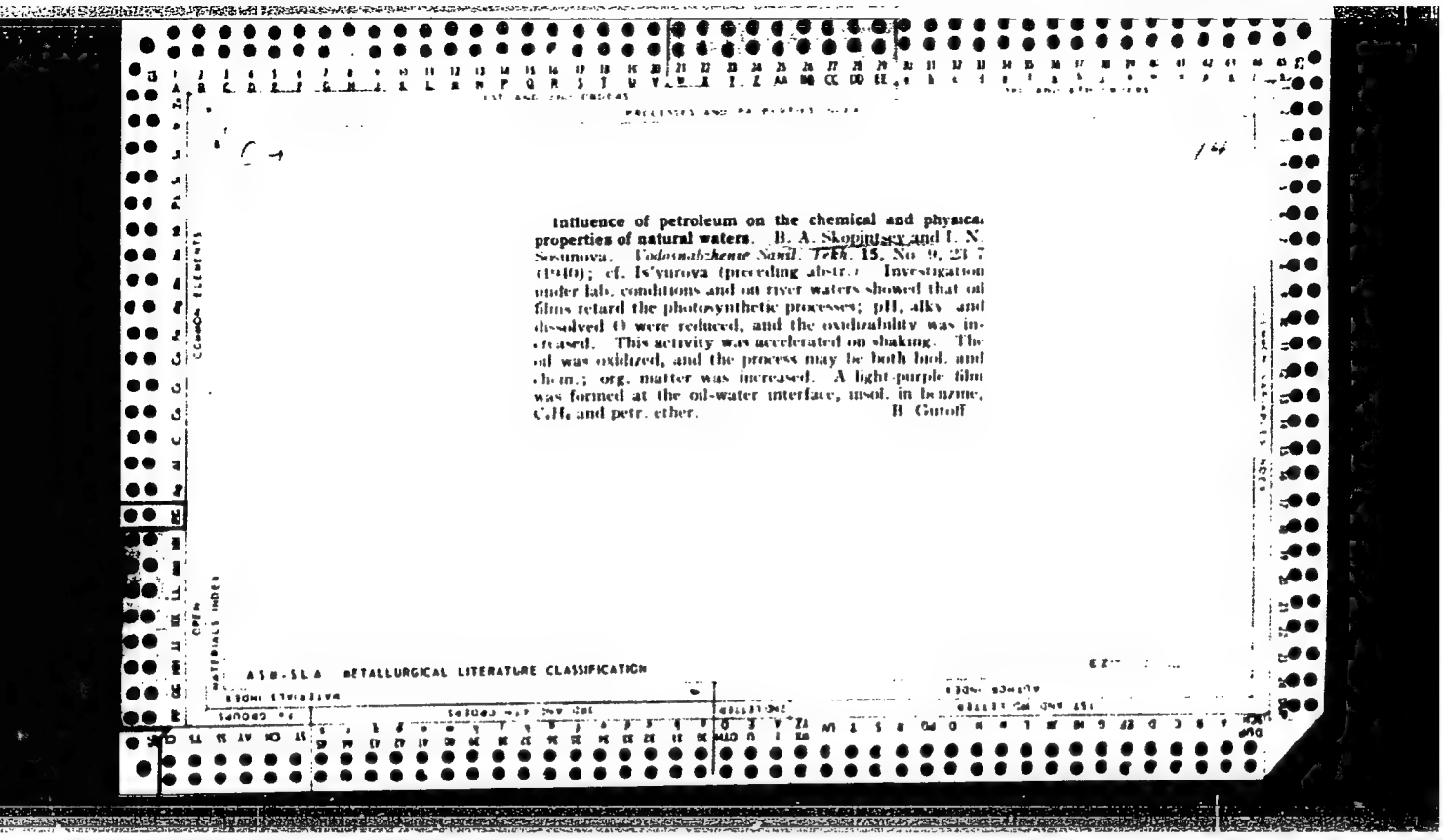
Oxidation processes in water during aerobic decompo sition of phytoplankton. B. A. Skopintsev and E. S Bruk. *Microbiology* (U. S. S. R.) 9, [illegible] (in English, 696 7)(1940). Oxidation of dead fresh-water plankton follows the stages occurring in water polluted by sewage. Color and turbidity are decreased but the odor lasts. The const. K_D for biochem. O demand is 0.085 at 16°. Ammonification is at a max. at 5-10 days, and its const. K_A is 0.108. Nitrites are at a max. at 9-22 days from the beginning of incubation. After that nitrates increase sharply. Phosphates reach a max. at 20-22 days. At 6° the O demand is lower: K_D = 0.035; K_A = 0.011 and nitrification is retarded. At 20 days the org. matter of decaying plankton contains 60-70% P and 81% N. In 53 days at 16° 82% of the chlorophyll had decompd., and 52% at 6°. The amt. of bacteria reached a max. in 2-5 days.

T. Laanes

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

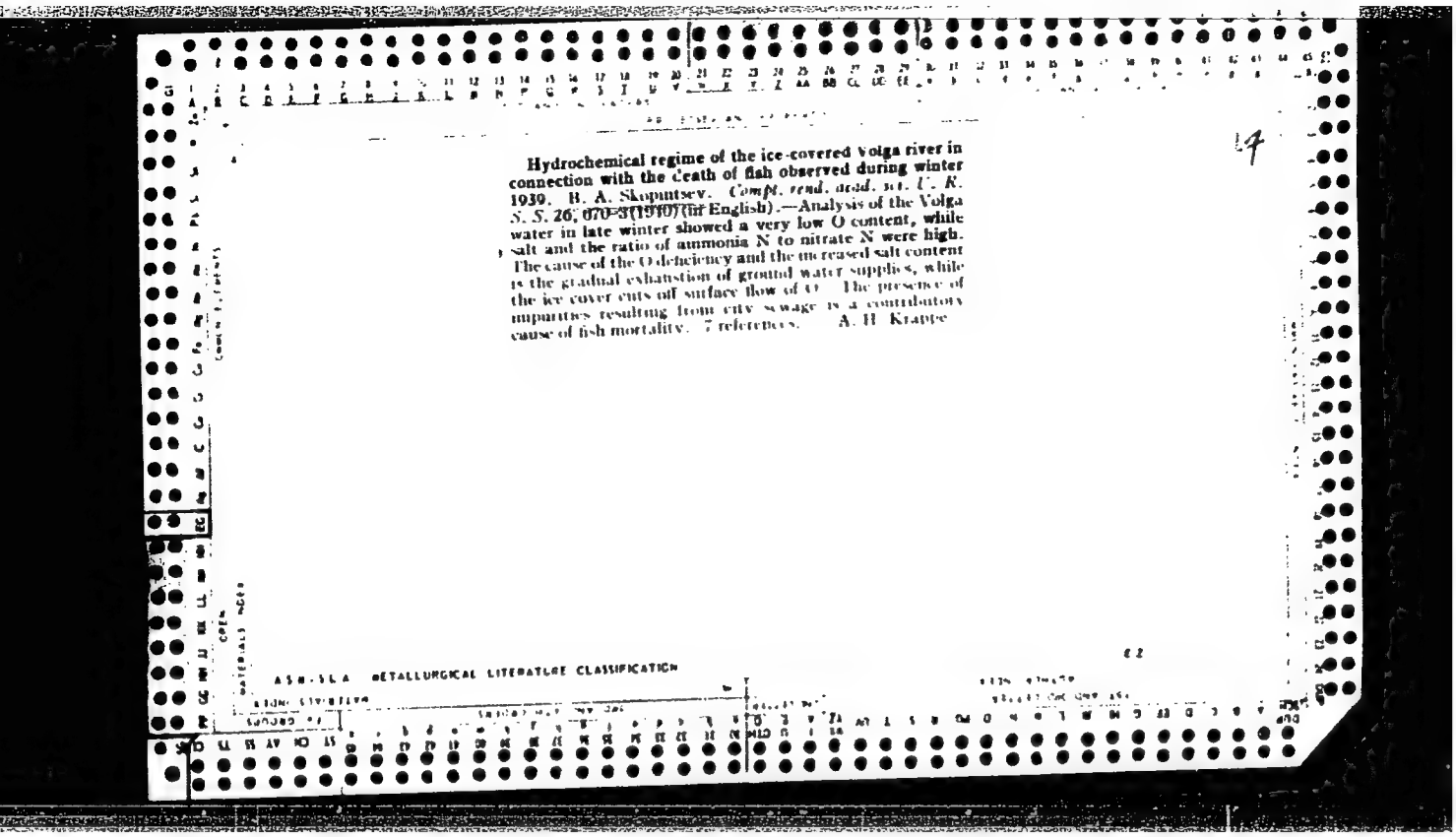


The residual aluminum. B. A. Skopintsev and M. T. Golubeva. *Vodosnabzhenie i Sanit. Tekh.* 15, No. 7, 40–4 (1940).—The residual Al entering the water supply is the result of unsatisfactory coagulation. Insufficient alum will favor the formation of stable colloidal $Al(OH)_3$, and an excess will retard the flocculation; this reduces pH to below 5.0 and causes partial soln. and insufficient utilization of the coagulant. Low temp. will also cause residual Al. Where lime is added careful dosing is important. Increased pH above 7.0 will lead to the formation of sol. aluminates. References. B. Gutoff



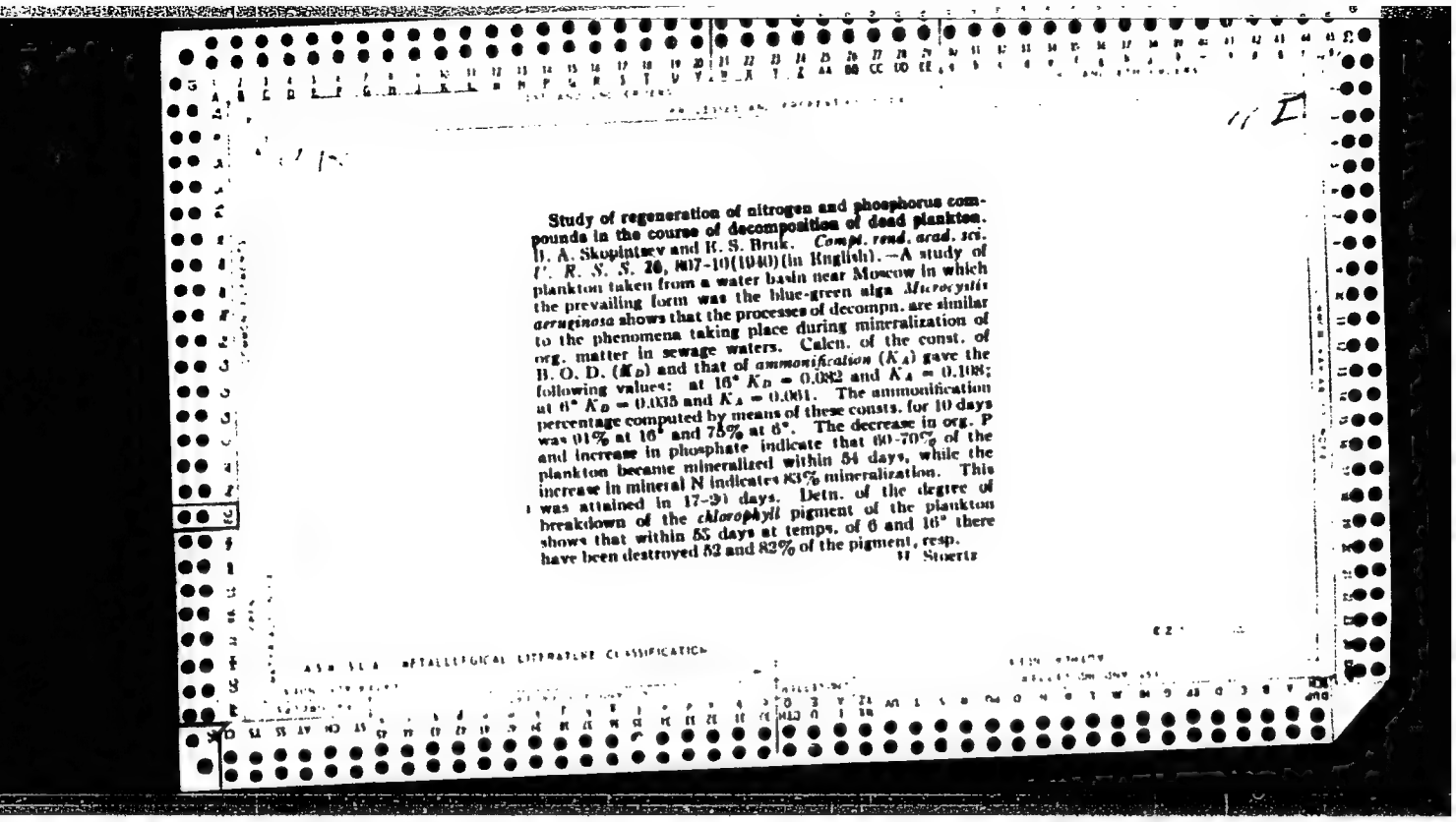
Influence of petroleum on the chemical and physical properties of natural waters. B. A. Skopintsev and I. N. Sosunova. *Vodosnabzhenie Sanit. Tekh.* 15, No 9, 21-7 (1940); cf. Is'urova (preceding abstr.). Investigation under lab. conditions and on river waters showed that oil films retard the photosynthetic processes; pH, alky. and dissolved O were reduced, and the oxidizability was increased. This activity was accelerated on shaking. The oil was oxidized, and the process may be both biol. and chem.; org. matter was increased. A light-purple film was formed at the oil-water interface, insol. in benzine, CCl_4 and petr. ether. B Gutoff

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

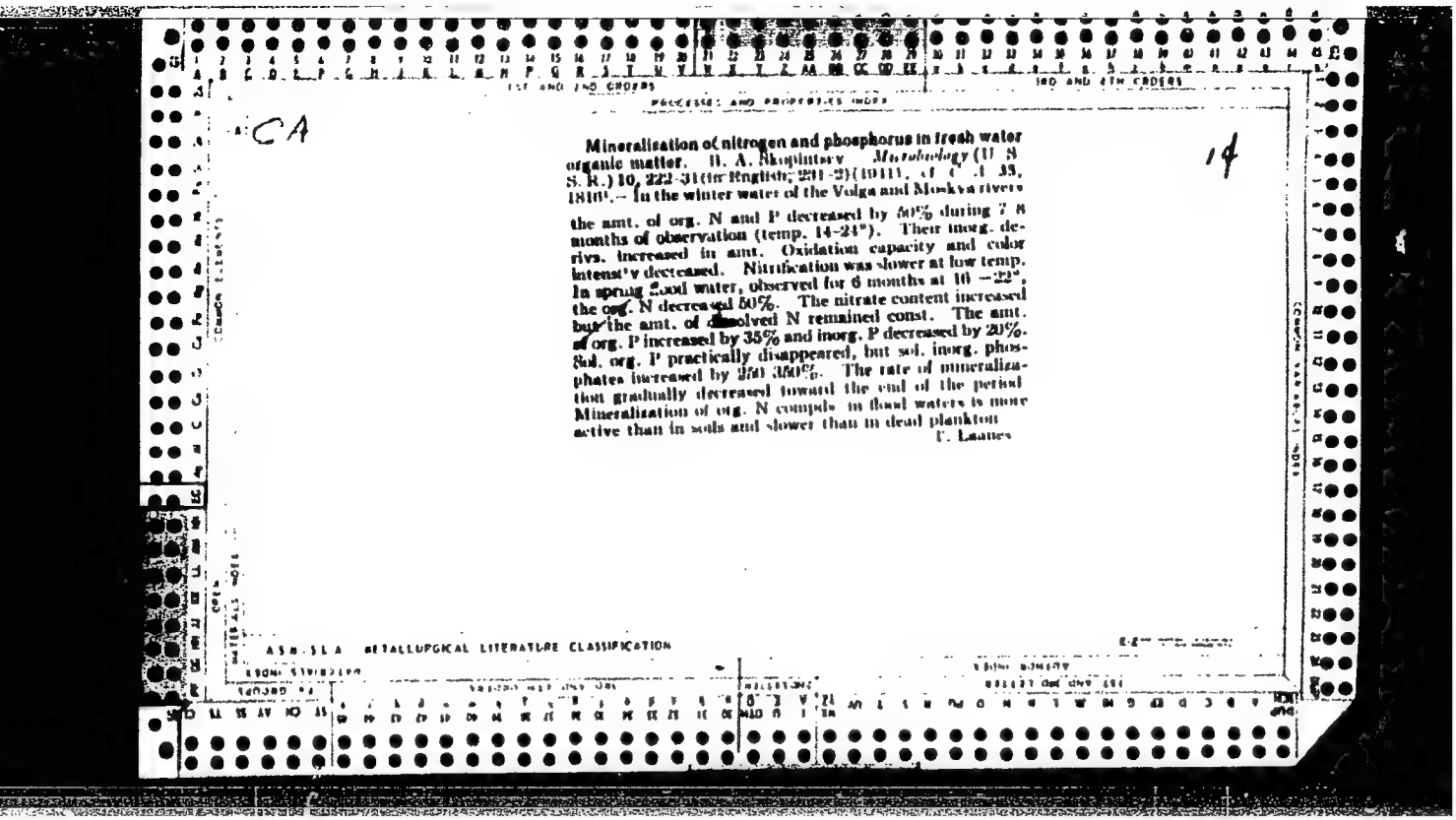


Hydrochemical regime of the ice-covered Volga river in connection with the death of fish observed during winter 1939. B. A. Skopintsev. *Compt. rend. acad. sci. U. R. S. S.* 26, 070-3(1940)(in English).—Analysis of the Volga water in late winter showed a very low O content, while salt and the ratio of ammonia N to nitrate N were high. The cause of the O deficiency and the increased salt content is the gradual exhaustion of ground water supplies, while the ice cover cuts off surface flow of O. The presence of impurities resulting from city sewage is a contributory cause of fish mortality. 7 references. A. H. Krappe

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



Study of regeneration of nitrogen and phosphorus compounds in the course of decomposition of dead plankton. D. A. Skopintsev and E. S. Bruk. *Compt. rend. acad. sci. U. R. S. S.* **26**, 807-10(1940)(in English).—A study of plankton taken from a water basin near Moscow in which the prevailing form was the blue-green alga *Microcystis aeruginosa* shows that the processes of decompn. are similar to the phenomena taking place during mineralization of org. matter in sewage waters. Calcn. of the const. of B. O. D. (K_D) and that of *ammonification* (K_A) gave the following values: at 16° K_D = 0.082 and K_A = 0.108; at 6° K_D = 0.035 and K_A = 0.061. The ammonification percentage computed by means of these consts. for 10 days was 91% at 16° and 75% at 6°. The decrease in org. P and increase in phosphate indicate that 60-70% of the plankton became mineralized within 54 days, while the increase in mineral N indicates 83% mineralization. This was attained in 17-21 days. Detn. of the degree of breakdown of the *chlorophyll* pigment of the plankton shows that within 55 days at temps. of 6 and 16° there have been destroyed 52 and 82% of the pigment, resp.
W. Stoertz

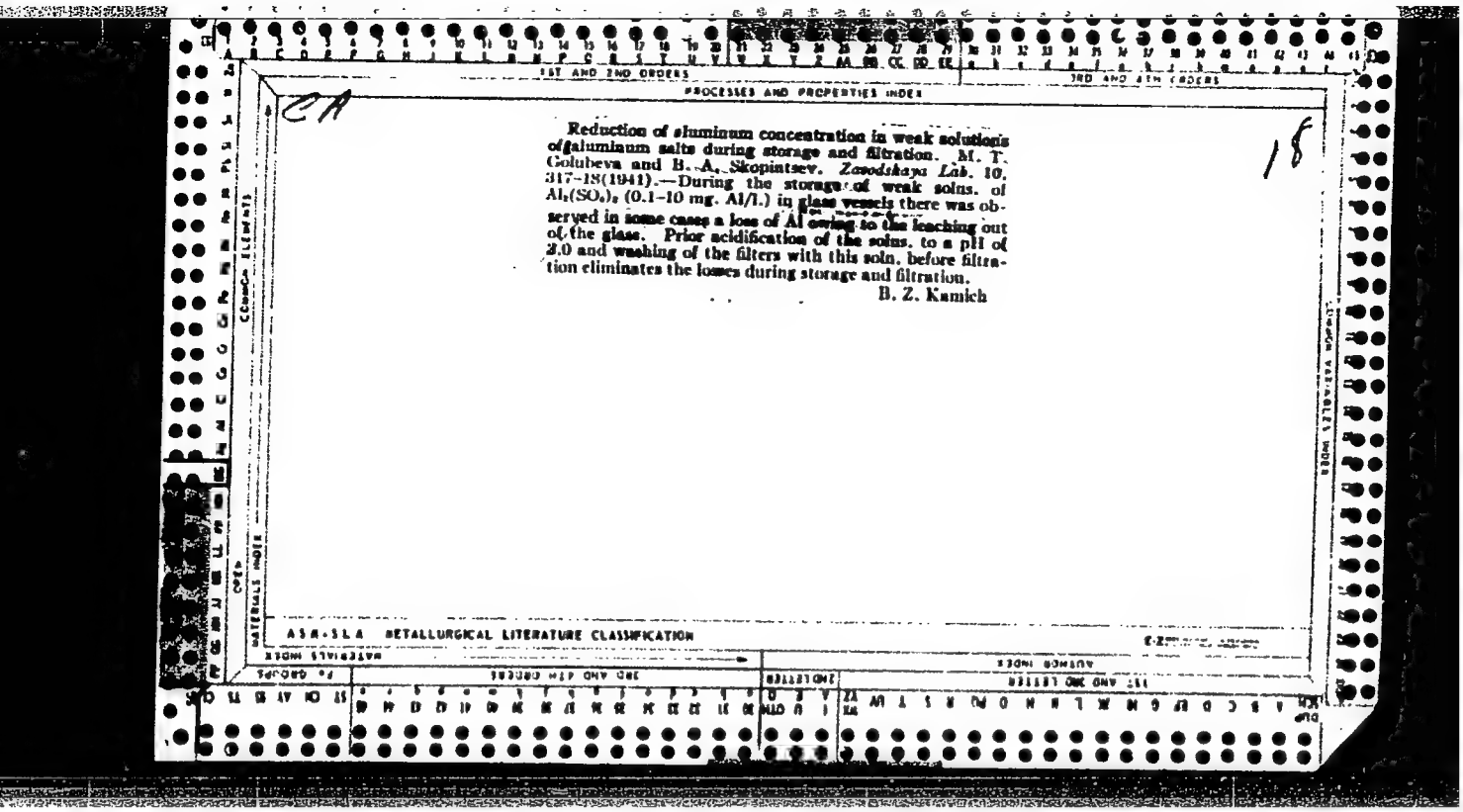


CA

14

Mineralisation of nitrogen and phosphorus in fresh water organic matter. B. A. Skopintsev *Mikrobiology* (U. S. S. R.) 10, 222-31 (in English; 231-2) (1941). — In the winter water of the Volga and Moskva rivers the amt. of org. N and P decreased by 50% during 7-8 months of observation (temp. 14-24°). Their inorg. derivs. increased in amt. Oxidation capacity and color intensity decreased. Nitrification was slower at low temp. In sprug flood water, observed for 6 months at 10-22°, the org. N decreased 50%. The nitrate content increased but the amt. of dissolved N remained const. The amt. of org. P increased by 35% and inorg. P decreased by 20%. Sol. org. P practically disappeared, but sol. inorg. phosphates increased by 250-350%. The rate of mineralization gradually decreased toward the end of the period. Mineralization of org. N compds. in flood waters is more active than in soils and slower than in dead plankton.
T. Laures

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION



1ST AND 2ND ORDERS

3RD AND 4TH ORDERS

PROCESSES AND PROPERTIES INDEX

CA

18

Reduction of aluminum concentration in weak solutions of aluminum salts during storage and filtration. M. T. Golubeva and B. A. Skopintsev. *Zavodskaya Lab.* 10, 317–18(1941).—During the storage of weak solns. of $Al_2(SO_4)_3$ (0.1–10 mg. Al/l.) in glass vessels there was observed in some cases a loss of Al owing to the leaching out of the glass. Prior acidification of the solns. to a pH of 2.0 and washing of the filters with this soln. before filtration eliminates the losses during storage and filtration.

B. Z. Kamich

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

Hydrochemical features of the river Volga between Kalinin and the river Dubna in 1931—1934. S. M. Dratschev and B. A. Skopintzev (*Hydrochem. Mat.*, 1941, **12**, 151—154). J. J. B.

Hydrochemical features of the rivers Dubna, Sestra, Jachroma, Ikscha, and Volguscha in 1933—1936. B. A. Skopintsev and S. M. Dratschev (*Hydrochem. Mat.*, 1941, **12**, 155—157).—The above rivers are tributaries of Upper Volga. J. J. B.

Hydrochemical behaviour of the river Volga and some rivers of the Volga basin in winter under ice. B. A. Skopintzev (*Hydrochem. Mat.*, 1941, **12**, 159—168).—The $[O_2]$ of the river H_2O decreases during the winter to a min. in March or April since in the winter months the rivers are fed with deep ground H_2O containing but little air. J. J. B.

SKOPINTSEV, B. A.

PA 13T11

USSR/Potamology
Oceanography

Apr 1946

"The Coagulation of Terrigenous Suspended Particles of River Discharge in Sea Water," B. A. Skopintsev, 14 pp

"Izv Ak Nauk Geograf i Geofiz" Vol X, No 4

Experiments with artifically prepared turbid water and river high flood waters, to establish the conditions limiting the coagulating action of the sea water's salt with regard to the terrigenous particles introduced into the sea and oceans by rivers.

13T11

SKOPINTSEV, B.A.

PA 50T84

USSR/Oceanography Jan 1947
Marine Research

"Coagulation of Humus Compounds of River Discharge in Sea Water," B. A. Skopintsev, State Oceanographic Inst, Lab Geochem Problems, 14 pp

"Izv Akad Nauk SSSR, Ser Geograf i Geofiz" Vol XI, No 1

Discusses results of laboratory investigations on the coagulation of natural water-soluble humus compounds by sea water. Experiments carried out with river and peat-bog waters. Included studies of the effect of various concentrations of humus compounds and sea-water salts, effect of freezing on biologic processes, etc. Content of humus estimated by determinations of the color of sea water. Conclusions drawn on the color of sea water, the bottoms of the Polar basin. Submitted by Academician P. P. Shirshov.

50T84

CA

11D

Rate of decomposition of the organic matter of dead plankton. B. A. Skopintsev. *Doklady Akad. Nauk S.S.S.R.* 58, 1797–1800(1947).—The rate constant for decompn. of the N component of org. matter was 0.044 for mixed plankton and 0.057 for diatoms *Nitzschia*. The temp. factor was relatively unimportant. The greatest mass of dead plankton matter decomp. in the upper layers of the sea.
C. M. Kosolapoff

[illegible] S. A.

"[illegible] Letter [illegible] in Sea Waters", Trudy GOIN, No 10- (22), 1948 (3-72)

SO: U-3 39, [illegible] Mar 49

SKOPINTSEV, B. A.

PA 41T51

USSR/Hydrology Mar/Apr 1948
Oceanology

"The Change in the Nitrogen (N) and Phosphorous (P) Content in Terrigenous Suspended Particles in a Water Medium," B. A. Skopintsev, State Oceanographic Inst, Lab of Geochem Problems, Acad Sci USSR, 11 pp

"Izv AkadNauk SSSR, Ser Geograf i Geofiz" Vol XII, No 2

Describes results of laboratory studies in the changes of N and P content in terrigenous suspended particles for the period of their presence in fresh and salt water. Establishes variations in the speed and character of content changes in terrigenous

41T51

USSR/Hydrology (Contd) Mar/Apr 1948

particles (in fresh or salt water), which are the result of biochemical processes. Basically characteristic for salt water were: a) slow accumulation of nitrates in the water, and b) much greater accumulation of mineral phosphors. Submitted by Academician P. P. Shirshov, 19 Feb 1947.

41T51